

**Exhibit 2**  
**(Redacted)**  
**(Previously Filed Under Seal as Dkt. 432)**

**UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA**

|  |   |                               |
|--|---|-------------------------------|
| FAIR ISAAC CORPORATION, a Delaware<br>corporation, | ) | Case No: 16-cv-1054 (WMW/DTS) |
|  | ) |                               |
|  | ) |                               |
| Plaintiff,   | ) |                               |
|  | ) |                               |
| v.   | ) | <b>Jury Trial Demanded</b>    |
|  | ) |                               |
| FEDERAL INSURANCE COMPANY, An                      | ) |                               |
| Indiana corporation, and ACE AMERICAN              | ) |                               |
| INSURANCE COMPANY, a Pennsylvania                  | ) |                               |
| corporation  | ) |                               |
|  | ) |                               |
| Defendants.  | ) |                               |

**EXPERT REPORT OF WILLIAM S. MCCARTER**

**May 17<sup>th</sup>, 2019**

**CONFIDENTIAL – ATTORNEY’S EYES ONLY**



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## **I. INTRODUCTION**

1. I am William McCarter, Founder and Principal Consultant for BRICLYN Advisory Services, LLC. My business address is 133 Sea Marsh Road, Fernandina Beach, FL 32034. I have spent over 34 years in the banking, financial services, and insurance industries. The last 22 years have been focused on product development, marketing, sales, and services delivery for property and casualty insurance technology solutions in matters related to insurance software.

2. BRICLYN Advisory Services was founded in 2018 to provide business and technology consulting services to insurance carriers, insurance solution providers, and insurance technology analyst firms. My consulting services are focused on helping insurance companies acquire and implement technology that supports core business operations. I am also registered with Thomson Reuters Expert Witness Services (TREWS) to provide expert witness consulting services.

3. I serve as a Senior Advisor for FOCUS LLC which is a firm that provides sell-side, buy-side, and recapitalization investment banking services. My role with FOCUS Bankers is to provide business and technology consulting services for the financial services industry regarding mergers and acquisitions. This includes business development in the insurance technology solutions and services market for companies contemplating selling and/or buying another company or asset to expand its business.

4. I have not been an expert witness in prior litigation.

## **II. SCOPE OF ASSIGNMENT AND COMPENSATION**

5. I have been engaged by Federal Insurance Company and ACE American Insurance Company (collectively “Federal”). The scope of my assignment is to review and evaluate the claim by Fair Isaac Corporation (FICO) for “...all profits derived by Federal and its wholly owned subsidiaries...”.<sup>1</sup> Specifically, I have been asked to provide my opinion on the use of Blaze Advisor® (Blaze) in conducting Federal’s day-to-day insurance business and the role that Blaze has on Federal’s insurance revenue and profits.

6. I am being compensated at the rate of \$275 per hour, including research, preparation of this report, deposition and trial. My compensation is not affected by the conclusions in this report or the outcome of this case.

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<sup>1</sup> FICO v. Federal. Second Amended Complaint. Dated September 11, 2019. pg. 12

### III. QUALIFICATIONS AND EDUCATION

7. I have 22 years of experience in property, casualty, and life insurance with a specific focus on core insurance software solutions and services. I have held technical, management, and executive level positions with insurance companies and insurance software providers. My experience provides a perspective on how the insurance and software industries relate to one another.

8. I was the Senior Vice President and Chief Information Officer (CIO) for Allianz of North America with responsibility for the information technology environment supporting the insurance business operations for asset management, property, casualty and life insurance lines of business and information technology operations for the Allianz Group in North America. “Allianz is the largest non-banking asset management company in the world with an insurance business that is the fifth largest in net written premium in the world”.<sup>2</sup>

9. I also held the position of Chief Information Officer for Fireman’s Fund Insurance, a property and casualty insurance company, with responsibility for the information technology supporting all property and casualty insurance lines of business including insurance products like those sold by Federal and referenced in this case. During my tenure at Fireman’s Fund, I developed the business case and implemented the iLog business rules management system to support commercial insurance.

10. After leaving Allianz in December of 2002, I took a position as Senior Vice President and Chief Operating Officer for ePolicy Solutions, a company that developed a policy administration system called RightRisk. A technology of the RightRisk system was a business rules management engine used for underwriting commercial and specialty insurance products. I was responsible for, among other activities, managing the product design, development, and implementation of the RightRisk system. Following the acquisition of ePolicy assets by Insurity, I became General Manager of the RightRisk product line within Insurity.

11. I took the position as President of MajescoMastek after leaving Insurity in 2006. While with MajescoMastek, I acquired a policy administration system and billing system solution called Renaissance from a company named Systems Task Group Limited. The Renaissance product was

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<sup>2</sup> AM Best. (2019, January 6). AM Best Ranks United Health Group and Allianz World’s Largest Insurers. Business Wire. Retrieved from <https://www.businesswire.com/news/home/20190107005617/en/Ranks-UnitedHealth-Group-Allianz-World%E2%80%99s-Largest-Insurers>

integrated with MajescoMastek software and rebranded as STG Policy Administration and STG Billing. Both of these solutions had externalized business rules management technology.

12. I left MasjescoMastek to join Dell Services and focused on the Life Insurance market until I joined CGI Technologies Inc. in 2014 as Vice President of Insurance Solutions. I was responsible for 5 product lines including the Ratabase® Rating and Pricing engine. Ratabase® is a business rules management system for property, casualty, and life insurance carriers that competes with Blaze.

13. Through the course of my insurance career, I have worked with many of the largest insurance companies in the world in various roles including account executive and program manager. Besides Allianz, I have worked with insurance companies including Farmers Insurance Group, The Travelers, Liberty Mutual Insurance, GEICO, Progressive, and American International Group (AIG). I have participated in or managed multiple large complicated implementations of policy administration systems and business rules management software.

14. I have a Masters in Business Administration with a concentration in Information Systems and a Bachelor's Degree in Human Resources from Sullivan University, Louisville, KY. I also have an Associate Degree in Business Programming from Watterson College. I developed and taught a class at Columbia University, New York, NY on the topic of Information Technology (IT) for the Non-IT Executive training program sponsored by Allianz Group. I have completed certification in insurance executive training at The Wharton School of Business, Philadelphia, PA sponsored by the American Institute for Certified Property and Casualty Underwriters. I completed eBusiness training at Harvard Business School, Boston, MA and I have certification from Darden Graduate School, Charlottesville, VA on Leading Strategic Change. I also have multiple certifications with mainframe and distributed computing technologies from IBM. I was named one of the Elite Eight CIOs by Insurance and Technology Magazine.

15. A copy of my Curriculum Vitae with additional information related to my experience is in Appendix D to this report.

#### **IV. DOCUMENTS AND INFORMATION CONSIDERED**

16. The information that was considered in forming my opinions is listed in the appendices to this report and in the footnotes and/or other citations to this report. I have interviewed the following individuals from Federal as part of my research:

- Mr. Henry Mirolyuz, Former Chubb Employee, Application Architect
- Mr. Kevin Murphy, Chubb, Senior Legal Counsel
- Ms. Ellen Garnes, Chubb, Operations Process Manager
- Ms. Helen Mencke, Chubb, AVP, OPA Business Process Owner
- Ms. Nancy Verduin, Chubb, VP, Operations, Business Process Manager
- Mr. Michael Schraer, Chubb, SVP Underwriting, Chief Products Officer
- Ms. Alissa Theberge, Chubb, SVP Underwriting, Officer
- Ms. Jennifer Santucci, Chubb VP Underwriting, Officer
- Mr. Ramesh Pandey, Chubb, VP, Systems, North American Architecture
- Mr. Phillip Folz, Former Chubb Employee, Division IT Controller
- Mr. Claudio Ghislanzoni, Chubb, Global, Chief Enterprise Architect

17. I have drawn on my years of experience working in insurance companies and insurance software providers to form my opinions and conclusions in this matter. My opinions are limited to those set forth in this expert report. I reserve the right to submit additional comments and material in support of my opinions on these topics including by deposition testimony. I also reserve the right to rely on any exhibits or testimony cited at trial. I also reserve all rights to utilize anything cited herein or cited in response by FICO as a basis for my opinions or as a demonstrative at trial. I expect to further elaborate and expand on the content of my report as necessary in testimony before the Court. In connection with any testimony, I may rely on materials referenced in this report and its attachments as well as demonstrative exhibits to be prepared and identified before my testimony. I have not yet prepared any demonstratives for use at trial.

18. I understand expert discovery in this matter is ongoing and other new information may become available prior to trial. I will be prepared to supplement my opinions in the event that any new facts become known to me prior to or during trial that may impact my opinions and the bases for those opinions. I am aware of my continuing obligation to supplement under Rule 26 of the Federal Rules of Civil Procedure.

19. I understand that the Court recently ordered FICO to produce additional documents and information, and that all of the documents and information have not been provided as of the date of this report. I specifically reserve the right to update and supplement this report and my conclusion based upon additional documents and information provided pursuant to the Court's Order.



## V. SUMMARY OF MY OPINIONS

20. My opinions are based on careful consideration of the facts and circumstances of this case as well as my education, experience, and research. I have reached the following opinions in this case.

21. Federal generates revenue and profits using its core competencies – not Blaze Advisor software, or any other software technology.<sup>3</sup> Federal provides all the insurance expertise and makes all business decisions that are required to generate gross written premium revenue and profits. Additionally, Federal takes all the financial risk related to the insurance policies including future loss obligations.

22. FICO does not have an insurance core competency.<sup>4</sup> FICO makes no decisions that result in improved premium revenue and assumes no financial risk on the policies that are processed by software applications that may have used Blaze as a technology. Blaze is a small technology of a very large company ecosystem of people, process, and technology.

23. I disagree with the conclusions from Mr. Whitener in his expert report. Federal's use of Blaze in connection with some of its software applications does not contribute to Federal's overall gross written premium revenue and profit in any appreciable sense. Mr. Whitener highlights efficiencies including speed of making a decision as the reason that Federal generated gross written premium revenue. However, it was Federal, not FICO or its products, that was responsible for the quality of the business rules that led to the business decisions that produce revenue. Federal, at times, implemented rules that reduced gross premium revenue and revenue growth based on its underwriting requirements. Federal also had, at times, quality issues with rules that led to bad decisions. A fast decision using a bad business rule does not mean a good business decision that leads to gross written premium revenue and revenue growth.

24. Mr. Whitener ignores the fact that Federal developed insurance processing applications on its own that it used to run its business operations.<sup>5</sup> Blaze did not provide insurance policy processing functionality. Blaze is a single software technology for use in connection with

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<sup>3</sup> Hamel, G. Prahalad, C.K. (May-June 1990). The Core Competence of the Corporation. Harvard Business Review. Boston, MA. Pg. 7. (competence in products with access to markets...contribution to the end customer product...Harmonization of complex individual technologies and production skills".

<sup>4</sup> FICO. (2018). Annual Report. "FICO provides products, solutions and services that enable businesses to automate, improve and connect decisions to enhance business performance". Retrieved from <https://investors.fico.com/static-files/8404a5d9-1d4a-4e09-8166-0008b336d7b6>.

<sup>5</sup> FED017914\_0001.

insurance processing applications that are part of a complex set of systems that make up Federal's business systems.<sup>6</sup>

25. Mr. Whitener does not undertake to measure any efficiencies Blaze provided to Federal.

26. It is my opinion that FICO provided Federal with an industry agnostic business rules engine (Blaze), which is a tool to manage rules Federal developed using its insurance expertise and knowledge.<sup>7</sup> Blaze was not useable out-of-the-box.<sup>8</sup> FICO did not provide Federal any insurance business rules.<sup>9</sup> The insurance business logic, derived from Federal's own employees using their own industry expertise, was converted into business rules and loaded into Blaze.<sup>10</sup> Blaze is analogous to an Excel spreadsheet that must be loaded with data and rules in order to generate output. It is a tool that is useless on its own without a user, like Federal, to load its business data and business rules into the software.

27. Further, it is my opinion that when purchasing insurance products customers are not influenced by and do not care what rules management system the insurance company uses. Blaze software is invisible to agents and brokers that may potentially use an application that also uses Blaze as a technology.

28. Federal had, and continues to have, many alternatives to Blaze that could have been deployed to provide the same utility to its business operations as Blaze.

29. Federal's gross written premium revenue and profits are the result of Federal's insurance knowledge, expertise, and access to insurance markets; its insurance products, business logic, and data; and its complex harmonization of individual technologies and production skills used to conduct insurance business.<sup>11</sup>

30. Federal's revenue and profits are not attributable to its use of a single piece of software like Blaze in a complex system that ultimately drives Federal's financial results.

31. I explain the bases for these opinions below.

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<sup>6</sup> FED006248\_0001. pg.3

<sup>7</sup> FICO. (2019). FICO Decisions Technologies. Retrieved from <https://www.fico.com/en/latest-thinking/product-sheet/fico-decision-technologies>

<sup>8</sup> Deposition of Chris Ivy. dated March 14, 2019. (*Ivy Deposition*). pg. 11:13-16

<sup>9</sup> *Ivy Deposition*. pg. 23:23-25, 49:25, 50:1

<sup>10</sup> *Ivy Deposition*. pg. 10:25, 11:1-6

<sup>11</sup> Hamel, G. Prahalad, C.K. (May-June 1990). The Core Competence of the Corporation. Harvard Business Review. Boston, MA. Pg. 7. (competence in products with access to markets...contribution to the end customer product...Harmonization of complex individual technologies and production skills".

## VI. BACKGROUND

32. I am providing a summary of the insurance industry operation related to this matter that includes an overview of Federal, its structure, products, core organizational capabilities, and business processes required to operate an insurance business like Federal's.

### A. Federal Business Overview

33. The insurance industry business model and its products are complex and are supported by skilled insurance experts, complex business processes, and complex technology systems. Federal is a multiple product line insurance company with the core competency to conduct insurance business.<sup>12</sup> Federal operates globally with many employees, locations, products, and distribution.

34. Insurance products are a guarantee of compensation for specified loss, damage, illness, or death in return for payment of a premium (also known as gross written premium).

35. The insurance industry consists of property and casualty insurers, life insurers and health insurers.<sup>13</sup> A property and casualty insurance company is divided into two major categories: 1) commercial lines products; and 2) personal lines products.

36. Federal has subsidiaries or divisions focused on commercial lines and specialty lines insurance products. Federal goes to market with its commercial and specialty products under the branding of Business Insurance. The branding approach allows commercial clients to pick from the business products that best suit its business risks.

37. It is common in the insurance industry for insurance companies to segment into multiple subsidiaries, divisions, or affiliated entities. Each entity has its own purpose, duties, and risks. For example, one entity may have authorization to write insurance for a particular geography such as individual states in the United States or foreign geographies. Other insurance companies may be limited in their ability to write business in multiple states.

38. Federal's commercial lines insurance products (also known as policies) are designed for businesses.<sup>14</sup> Federal's specialty lines insurance is a type of commercial insurance focused on

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<sup>12</sup> Hamel, G. Prahalad, C.K. (May-June 1990). The Core Competence of the Corporation. Harvard Business Review. Boston, MA. Pg. 7. (competence in products with access to markets...contribution to the end customer product...Harmonization of complex individual technologies and production skills".

<sup>13</sup> Kearney, Susan J. (2013). Insurance Operations. American Certified Property and Casualty. The Institutes. Malvern, PA

<sup>14</sup> Insurance Information Institute (2019, April 30). Introduction. Retrieved from at <https://www.iii.org/publications/commercial-insurance/introduction>.

unique types of risks. Federal offers commercial and specialty insurance products under the branding of Business Insurance and lists 19 different business insurance offerings on its web site.<sup>15</sup>

- Commercial Insurance Products
  - General Liability
  - Package
  - Environmental
  - Global Casualty
  - International Solutions for Mid-Sized Companies
  - Marine
  - Medical Liability
  - Product Recall
  - Property
  - Railroad
  - Business Owners Product
  - Umbrella & Excess Casualty
  - Workers Compensation
- Specialty Insurance Products
  - Cyber
  - Excess & Surplus
  - Management Liability
  - Professional Liability
  - Small Commercial
  - Surety

39. Federal generates revenue in two ways:<sup>16</sup> by selling insurance policies to generate gross written premium revenue and; by investing reserves in the financial markets to generate investment income.

40. Federal measures profitability of its products and its product lines of business using a metric called the combined ratio. The combined ratio is calculated by adding the losses and expenses and then dividing by the earned premium revenue. Said a different way, the combined ratio represents how much money is made or lost for each dollar of premium revenue earned. If Federal pays \$0.80 in expenses for every \$1.00 of premium earned, the company will make \$0.20

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<sup>15</sup> Chubb Limited. (2019, April 30). Business Insurance. Retrieved from at <https://www.chubb.com/us-en/business-insurance/>

<sup>16</sup> Kearney, Susan J. (2013). Insurance Operations. American Certified Property and Casualty. The Institutes. Malvern, PA

cents of underwriting profit or a combined ratio of 80%. If Federal pays \$1.05 in expenses for every \$1.00 of earned premium, the company has an underwriting loss or combined ratio of 105%.

41. The overall combined ratio is the aggregate of the losses and expenses from all lines of business divided by earned premium from all lines of business. Federal improves its combined ratio by adjusting premium rates and reducing expenses.

42. The overall profits of Federal are the underwriting profit from insurance policies plus investment income. Blaze was not involved in Federal's investment management systems. FICO concedes that it is only seeking profit derived from Federal's gross written premiums. This report, therefore, focuses solely on Federal's profit from gross written premium revenue for insurance policies.

43. To improve gross written premium revenue and profits, Federal outlines multiple strategies focused on growth in its annual report.<sup>17</sup> FICO (and the software Blaze) has no involvement in the development and implementation of Federal's growth strategies.

#### B. Federal Organization

44. Federal employs over 35,000 people to support its daily business operations. Federal has skilled experts with specialized insurance knowledge and expertise. Federal's employees include skilled actuaries, product managers, underwriters, compliance managers, and many more specialized skillsets. These insurance experts know the insurance business and make independent decisions based on their own expertise to develop products, pricing, and assess risk among the many other activities an insurance company performs.

45. Actuaries analyze financial risk using mathematics, statistics and financial theories. Actuaries work in the insurance industry to determine good risks or where the companies are less likely to experience a loss. Thus, pricing rules and decisions are made by Federal's actuaries, using their own industry expertise, and play a large role in determining gross written premium for insurance policies.

46. Product managers develop the insurance products that the insurance company will sell. The insurance products are made up of many rules and decision, which dictate whether the company will accept an insurance policy and these rules and decisions guide the selling and servicing of the insurance policy.

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<sup>17</sup> Chubb Limited. (2018). Annual Report. Pg. 8-14. Retrieved from [http://s1.q4cdn.com/677769242/files/doc\\_financials/2019/AGM/Chubb-Limited-2018-Annual-Report.pdf](http://s1.q4cdn.com/677769242/files/doc_financials/2019/AGM/Chubb-Limited-2018-Annual-Report.pdf)

47. Underwriters decide whether to provide insurance, and under what terms. Underwriters assess insurance applications submitted by Federal agents and customers. Underwriters either accept or reject the applications based on Federal's underwriting rules and decisions. It is the underwriters' decision, using their own insurance expertise, that determine the gross written premium from approved insurance policies.

48. Underwriters also provide feedback to the product managers and actuaries on changes to the product and pricing. This collaboration adds another layer of complexity to Federal's business operation and helps ensure that Federal is taking appropriate financial risks for the insurance policies that are written.

49. Compliance managers make sure that a company is conducting its business in full compliance with all national and international laws and regulations that pertain to its particular industry, as well as professional standards, accepted business practices, and internal standards. If a compliance manager develops a business rule that is not in compliance with regulations, Federal could be subject to an audit and potentially fined. Federal's compliance managers, not FICO, developed and maintained business rules and decisions related to regulatory compliance.

50. Claims managers and specialist are key resources for a insurance company. Typically, agents and brokers communicate with policyholder as an intermediary for the insurance carrier. Claims is only one of two places where the policyholder actually connects with an insurance carrier. The other is policy billing services. The claims experience is key to retention of policyholder over time. Federal has an experience team of claims experts that define the business rules for processing and decisioning a claim from a policyholder.

51. It has been my experience in many of the insurance companies where I have worked that the employees are critical to the business. While automation helps improve the employee workload, it is the employees knowledge of the business and customer relationship management skills that provide access to markets and insures the company takes the right risk and pays appropriate claims. It takes human judgment to underwrite and manage claims in insurance. Technology alone does not generate these results.

52. Federal's organization is complex and large and made up of insurance experts that make all the business rules and decisions relative to its business operations.<sup>18</sup> FICO does not provide

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<sup>18</sup> FED000122\_0013. "All companies have business rules...In the minds of experienced employees".

any insurance knowledge to support Federal's business operation. FICO also does not provide any insurance business rules or decisions with Blaze. Additionally, Blaze is not visible to operational employees of Federal and not visible to agents and brokers that interact with Federal employees.

53. Finally, FICO does not take any financial risk related to the decisions that Federal employees make in accepting insurance policies or paying claims. Blaze is a technology that indirectly supports a small number of the over 35,000 Federal employees.

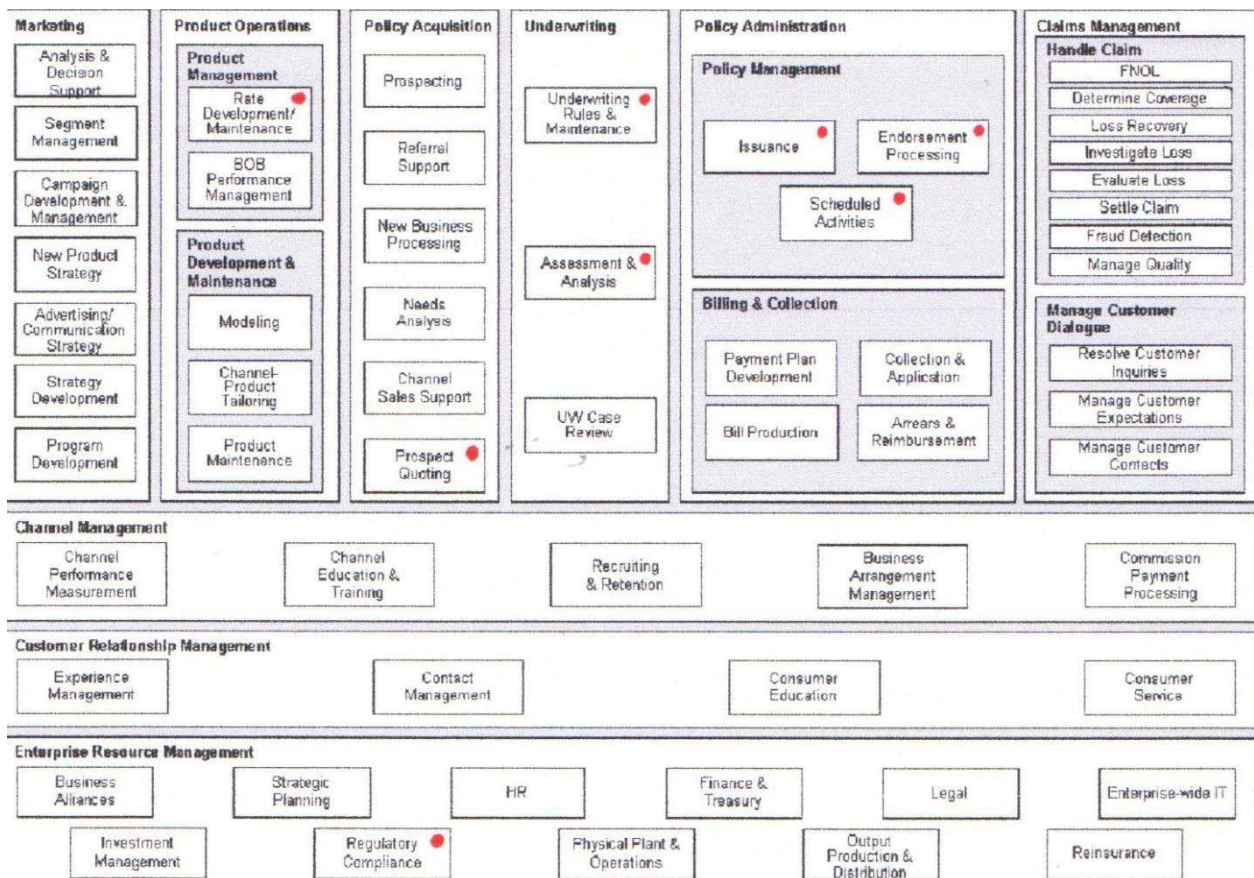
#### C. Federal Business Processes

54. Diagram 1 on the next page shows a summary of the functional business model for a property and casualty insurance company. "The model is used by insurance companies as a reference to communicate the business processes within an insurance company and helps the employees to communicate with multiple internal and external resources looking to implement technology. The functional requirements of an insurance company are expressed as groups of business activities or units of work that are performed as part of the business operations".<sup>19</sup>

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<sup>19</sup> IBM (2012). IBM Industry Models for Insurance. Business Activity Model. pg. 11. Retrieved from [ftp://public.dhe.ibm.com/software/data/sw-library/industry-models/brochures/IBM\\_Insurance\\_IAA\\_Warehouse\\_GIMv85.pdf](ftp://public.dhe.ibm.com/software/data/sw-library/industry-models/brochures/IBM_Insurance_IAA_Warehouse_GIMv85.pdf)





**Diagram 1 – IBM Property and Casualty Business Activity Model**

55. Federal operates these business activities and further customizes them for the specific insurance products it sells and geographies in which it operates. The customization is required to match Federal's insurance products with the targeted distribution requirements (agents, brokers, direct), target customers (commercial or specialty), policy features, and regulatory environments.

56. The property and casualty business model has 9 major business activity categories with 59 activity groups. For example, Claims Management has 11 activity groups and each activity within the Claim Management activity group has many discreet work items that have to be performed to conduct Claims Management.

57. The following Activity Categories and Activity Groups within the Categories can be viewed as thousands of discreet tasks that need to be performed in an insurance company:

1. Marketing
  - Analysis and Decision Support



- Segment Management
- Campaign Development and Management
- New Product Strategy
- Advertising and Communication Strategy
- Strategy Development
- Program Development
- 2. Product Operations
  - Rate Development and Maintenance
  - BOB Performance Management
  - Modeling
  - Channel-Product Tailoring
  - Product Maintenance
- 3. Policy Acquisition
  - Prospecting
  - Referral Support
  - New Business Processing
  - Needs Analysis
  - Channel Support
  - Prospect Quoting
- 4. Underwriting
  - Underwriting Rules & Maintenance
  - Assessment & Analysis
  - Underwriting Case Review
- 5. Policy Administration
  - Issuance
  - Endorsement Processing
  - Scheduled Activities
  - Payment Plan Development
  - Bill Production
  - Collection & Application
  - Arrears & Reimbursement
- 6. Claims Management
  - First Notice of Loss (FNOL)
  - Determine Coverage
  - Loss Recovery
  - Investigate Loss
  - Evaluate Loss
  - Settle Claim
  - Fraud Detection
  - Manage Quality
  - Resolve Customer Inquiries
  - Manage Customer Expectations
  - Manage Customer Contacts
- 7. Channel Management

- Channel Performance Management
  - Channel Education & Training
  - Recruiting & Retention
  - Business Arrangement Management
  - Commission Payment Processing
8. Customer Relationship Management
- Experience Management
  - Contact Management
  - Consumer Education
  - Consumer Service
9. Enterprise Resource Management
- Business Alliances
  - Investment Management
  - Strategic Planning
  - Regulatory Compliance
  - Human Resources
  - Physical Plant & Operations
  - Finance & Treasury
  - Output Production & Distribution
  - Legal
  - Reinsurance
  - Enterprise Wide Information Technology

58. Each work item within an Activity Group is associated with business rules and decisions that are being made by employees within the Federal business operation.

59. Blaze is utilized, sometimes minimally, in a small number of work items. FICO provides a view of where Blaze maps to the business processes (or work items) of an insurance company.<sup>20</sup> Blaze is not a significant part of Federal's business activities based on my review of the use of Blaze.

60. Federal's business activities are unique to Federal. Blaze potentially improved the efficiency of certain decisions or workflows; however, it is difficult to measure any efficiencies that Blaze may have provided to Federal's business activity.

#### D. Use of Blaze Within Federal's Various Business Processes

61. An example of Federal uses Blaze is in Rate Development and Maintenance. Federal's actuaries determine the appropriate premium revenue rate and pricing for a given insurance policy as part of the rate maintenance activity group. Rates and pricing are developed by its insurance

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<sup>20</sup> FED000171\_0011, pg. 11. "Business Rules in the Value Chain".

actuaries using statistical models. Federal created business rules and decisions associated with the rates and loaded them into Blaze.<sup>21</sup> Rate Development and Maintenance has activities that Blaze does not support.

62. Federal uses Blaze in Underwriting Rules & Maintenance as well. Federal has a team of skilled insurance product managers who design insurance policies. Federal's product managers establish the coverages for the policy and the underwriting business rules by which various policies would be sold. Federal harvested some of the business logic from the insurance product managers and converted it to business rules and then loaded the business rules into Blaze.<sup>22</sup> There are activities within Underwriting Rules and Maintenance that Blaze does not support.

63. Federal also uses Blaze as a tool to support application workflow to agents as part of the Underwriting Rules & Maintenance. Insurance policies are sold through independent agents, exclusive agents and brokers or marketed directly to consumers. Federal has a network of professional agents and brokers who utilize their specific skillset to sell insurance products.<sup>23</sup> Federal uses some workflow rules to route insurance applications received by these agents, brokers, or otherwise to the correct underwriter for decision making.<sup>24</sup> Federal created the business rules for agent workflow and loaded the business rules into Blaze.<sup>25</sup> Blaze supports the agent workflow rules in Underwriting which is a small work item relative to the overall activities of Underwriting insurance.

64. Mr. Whitener attempts to connect Blaze with the CIS Claims technology use. He is not correct. Federal does not use Blaze with the CIS Claims system.<sup>26</sup> Claim's management is a significant business activity within Federal and Blaze has no use in the CIS Claims processing.

65. Federal uses Blaze as part of its Prospect Quoting activity. When an application for insurance is entered, there is a service call to Blaze to provide Federal's business rules and decisions for the product being requested. Federal created the business rules and decisions for prospect quoting and loaded them into Blaze. Quoting requires interaction with agents and brokers and, at times, the customer. Blaze provides a user interface that is branded as Federal to capture

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<sup>21</sup> *Ivy Deposition*. pg. 10:25, 11:1-6

<sup>22</sup> *Ivy Deposition*. pg. 10:25, 11:1-6

<sup>23</sup> Chubb Limited. (2019, April 30). Agents and Brokers. Retrieved from at <https://www.chubb.com/us-en/business-insurance/>

<sup>24</sup> FEF001590\_0001.

<sup>25</sup> *Id.*

<sup>26</sup> Kevin Harkin Deposition. dated March 25<sup>th</sup>, 2019. (*Harkin Deposition*). pg. 31:18-20, 95:15-20

information for a quote. Blaze interfaces to Federal systems to actually develop the quote. Blaze is a small activity relative the entire set of activities that is part of quoting an insurance policy.

66. Federal uses Blaze for business rules processing in its Issuance, Endorsement Processing, and Scheduled Activities as part of Policy Administration business process. As a software technology of the Policy Administration System, business rules and decisions are processed for policy renewals, new policies, and changes (also known as endorsements) to policies. The business rules and decisions determine which policies get renewed manually and those that are renewed through Federal's renewal application. Federal created and loaded business rules and decisions into Blaze for policy administration requirements.<sup>27</sup> This is only part of the scheduled activities within Federal commercial and specialty insurance operation. The rest of the activities are performed by Federal employees and systems.

67. Federal also uses Blaze as a software technology of the applications for regulatory compliance related specifically to insurance policy processing. Blaze is used to process the business rules and decision points for certain compliance tracking applications. Federal made all the business rules and decisions and loaded them into Blaze. Blaze use in compliance is minimal compared to the compliance activities required by an insurance company. Blaze basically is used in two compliance work items. The remainder of compliance activity is handled by Federal either manually or through its proprietary systems.

68. Federal customized its business processes to match its growth strategies. Federal is responsible for the decisions that generate gross written premium revenue and revenue growth, and not FICO or any of the other vendors that Federal contracts with for goods and services. Business rules within an organization encapsulate its business activity, its methodology, and its internal capabilities.<sup>28</sup> Federal is responsible for the knowledge, expertise, and business activity required to conduct insurance operations.

69. Federal is a global company with over 35,000 employees, locations, insurance products, and distribution channels. Federal performs thousands of business activities and work items to sell and services insurance policies. Each activity potentially has business rules and decisions. Only a fraction of Federal's business rules and decisions were ever loaded into Blaze to assist Federal with employees work items of its business. The use of Blaze within Federal is in a limited

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<sup>27</sup> *Ivy Deposition*, pg. 24:1-8, 24:17-20

<sup>28</sup> FED000122\_0006. "Decision Management encapsulates processes, methodology, and internal capabilities"

set of activities and insurance products. Blaze's use is relatively small based on my experience with 7 insurance companies in North American that are part of the Allianz Group and with a number of insurance clients that I have worked with in the past 22 years.

## VII. BLAZE INDUSTRY AGNOSTIC BUSINESS RULES MANAGEMENT TOOL

70. "A business rules management system is a collection of design-time and runtime software that enables an enterprise to explicitly define, analyze, execute, audit and maintain a wide variety of business rules. Business rules are implicit and explicit business directives that define and describe guidance for making a business decision. Business rules can collectively be called business logic and should be expressed in a way that makes them easily understood by business people".<sup>29</sup>

71. One of the characteristics of a business rules management system is that business rules must be loaded by the customer. Blaze is a business rules engine that is licensed for decision management.

72. A business rules engine requires the customer to utilize their own industry expertise in order to realize any benefit from the engine because the engine is not tailored for use in any specific business type. In insurance there are thousands of decisions related to processing an insurance policy that may be able to be automated using a business rules engine like Blaze, however there are also many decisions that cannot be automated. Making this distinction and utilizing the engine accordingly requires expertise from individuals with knowledge of the specific industry.

73. Just because you can, does not mean you should use a business rules engine. Over the past 22 years I have seen technology deployed for the sake of technology. For example, during my tenure with ePolicy Solutions, one of our clients wanted to automate some business rules in commercial policy processing. The business had a policy volume of 100 policies with a high average premium per policy. To build the technology to automate the rules for 100 policies was more expensive over a 10 year period than having a few employees handling the task using a spreadsheet.

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<sup>29</sup> Clark, W., Driver, M, Scuulte, R. W., Dunie, R. (2019, May 8). Innovation Tech Insight for Business Rules Management Systems. pg. 3. Gartner. Stamford, CT.

74. Federal has only automated a small amount of the business rules and decisions that take place every day to conduct business. Blaze plays a small role in the business processing ecosystem at Federal.

75. The quality of a business rule, as determined by the individual with industry knowledge who creates the rule, is what determines the quality of a decision's outcome from processing that rule. If Federal loads inaccurate business rules, the decision will not provide the intended results. Federal can potentially lose gross written premium revenue and/or incur losses from using Blaze with inaccurate business rules. For example; if business rule is miscoded and allows a decision to approve a high risk driver for an auto policy, the company would not generate enough gross written premium relative to the risk. Federal owns the quality of all the business rules and decisions that were loaded into Blaze. Federal also takes all the risk relative to the quality of the business rules.

76. Based on my experience, there are three alternatives for business rules management in the insurance industry: 1) manual lookup; 2) hard-coding in applications; and 3) a business rules engine.

77. The first alternative is manually looking up business rules and decisions in documents as part of insurance policy processing. Underwriters create underwriting manuals that guide decisions on which policies to approve. Actuaries create rate sheets to be used by underwriters to retrieve a rate for policy coverage. Manual look-ups continue to be used by insurance companies where appropriate. Some of Federal's applications that utilize Blaze could be using a manual lookup approach today. This includes the Texas Accident Preventions System.

78. The second alternative is having programmers hard-code business rules in insurance processing applications. Many policy administration systems utilize a combination of hard-coding and externalize rules systems. Again, hard-coding may be a good alternative for the appropriate application that has infrequent rule changes.

79. The third alternative is a business rules engine. Business rule engines allow companies to externalize the hard-coded business rules from the insurance applications and share the rules with multiple applications in a system. Business rules engines are evolving to become a technology of Decision Management Systems and Business Process Management Systems.

80. FICO Blaze competes in the business rules management system market globally. The top business rules management vendors include IBM, Oracle, and FICO. IBM leads the market with

22.45% market share followed by Oracle with 18.93% market share. FICO is third in global market share with 12.93%.<sup>30</sup>

81. FICO refers to the benefit of “increasing speed” for various decisions as evidence of Blaze improving gross written premium and revenue growth. Based on the claim that FICO is making, FICO must assume that Federal generated gross written premium by using Blaze to speed up quotes, speed up renewals, speed up new product introduction, speed up product changes, and speed up compliance reporting.<sup>31</sup>

82. My experience has been that speeding up decisions does not mean accurate decisions and increasing speed may compound the negative effects from flawed decision-making. Federal is responsible for the quality of the decisions that are processed using Blaze. If Federal loads a business rule that causes Federal to lose policies or increase claims, Federal would suffer financial harm. This demonstrates the value is created by Federal people, knowledge and expertise.

83. Federal licensed Blaze as a business rules management system to externalize the business rules that were existing in Federal applications.<sup>32</sup> Federal’s justification for acquiring Blaze did not include a benefit of improved revenue or growth from the use of Blaze.<sup>33</sup>

84. FICO assisted Federal in converting Federal’s pre-existing business rules into the Blaze required format.<sup>34</sup> For new business rules, the business logic and data validation rules were gathered or harvested from the minds of Federal’s skilled business experts and converted into business rules.<sup>35</sup>

## VIII. FEDERAL PROPRIETARY INSURANCE APPLICATIONS USE BLAZE

### A. Federal Insurance Policy Administration Systems

85. Federal’s technology systems are large and complex. Federal internally developed insurance applications such as CSI Express, ADAPT, Texas Accident Prevention System, and

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<sup>30</sup> TechSciResearch. (2019). Global Business Rules Management Systems (BRMS).

Pg. 42. New York, NY.

<sup>31</sup> Expert Report of Mr. R. Bickley (Bick) Whitener, (2019, April 19). pg. 10-11

<sup>32</sup> Phillip Folz. May 8<sup>th</sup>, 2019. *Phone Interview*.

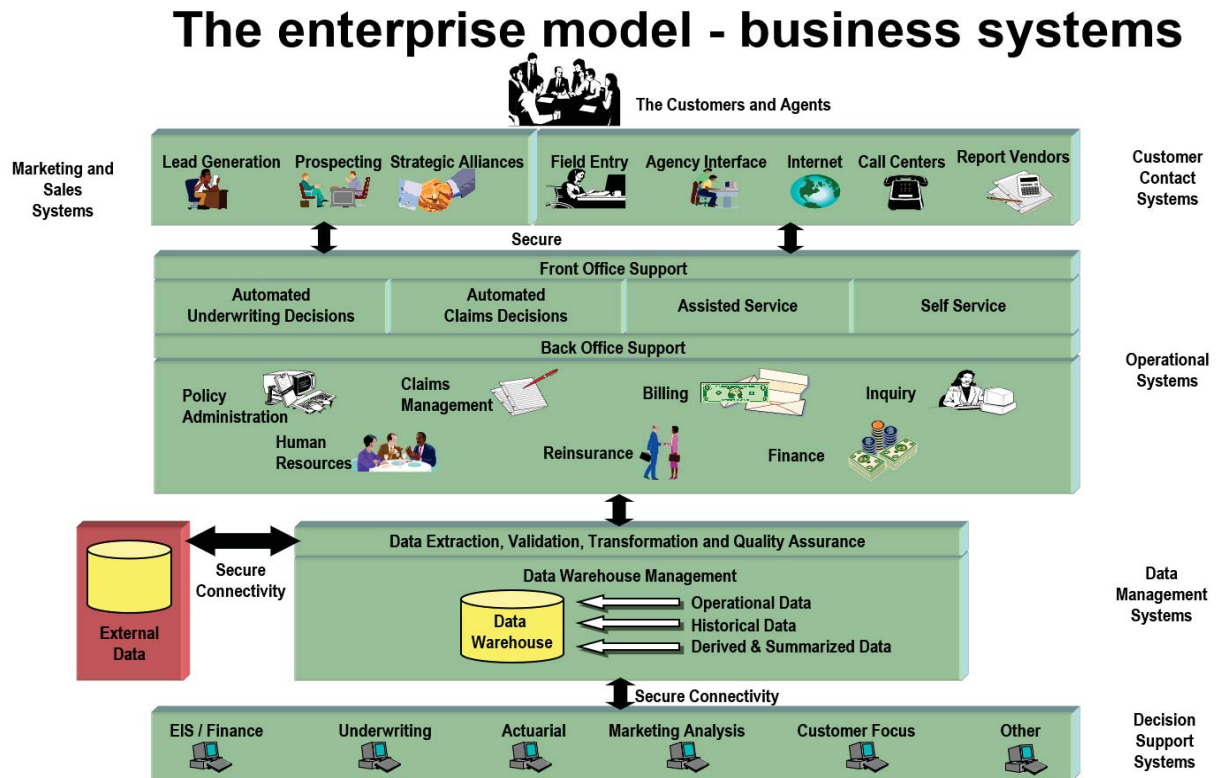
<sup>33</sup> *Id.*

<sup>34</sup> *Ivy Deposition*. pg. 27:8-11, 27:20-21

<sup>35</sup> Henry Mirolyuz Deposition. dated January 11, 2019. (*Mirolyuz Deposition*) pg. 150:2-16



more, and then integrated third-party vendor applications to create its core operational systems as pictured in Diagram 2 below.



**Diagram 2 – Insurance Business Systems Overview<sup>65</sup>**

86. The business systems include:

- Marketing and Sales Systems
- Customer Contact Systems
- Operational Systems
- Data and Management Systems
- Decision Support Systems

87. Federal has approximately 1500 applications that make up Marketing, External Facing, Policy Administration, Chubb Portfolio, Reporting, Corporate Reporting that are used for Commercial and Specialty insurance business.<sup>36</sup>

<sup>36</sup> FED006248\_0003.



88. Blaze is only used in 10 of Federal's 1,500 applications.<sup>37</sup> Additionally, each application is made up of multiple internally developed programs and potentially uses Third-party technologies.<sup>38</sup> It is common for insurance companies to leverage functionality from third-party software providers who specialize in certain software functions.

89. Based on my review of Third-Party technologies used by Federal, Blaze is 1 of 45 Third-Party software technologies used by Federal.

90. Based on my review, I am estimating that Federal has a total of 1,545 technologies that are used to build and implement its business applications. Blaze is 1 technology of Federal's 1,545 technologies or 0.06%.

91. Blaze does not have insurance processing functionality and Federal provided all the insurance applications that utilize Blaze for rules management functionality. Blaze only works when it is integrated with core insurance applications that have the required insurance functionality for selling and servicing insurance policies.<sup>39</sup>

#### B. Federal Insurance Policy Administration Systems

92. Federal has a large and complex set of insurance applications including many policy administration systems. A "policy administration system is the system of record for all policies that an insurance company has written. A policy administration system is a repository of policy-level data related to objects of insurance, coverages, limits, conditions, exclusions, duration of the policy, endorsements. In actual practice, an insurer uses a policy administration system either by itself or closely integrated with specific technologies. The policy administration system is used to execute a number of core processes, and relies on several types of supporting capabilities".<sup>40</sup>

93. Based on my experience, it is common in the insurance industry for large multiple product insurance company's like Federal to have many policy administration systems to support different insurance products. Federal's policy administration systems are customized to its insurance products and geographic requirements.

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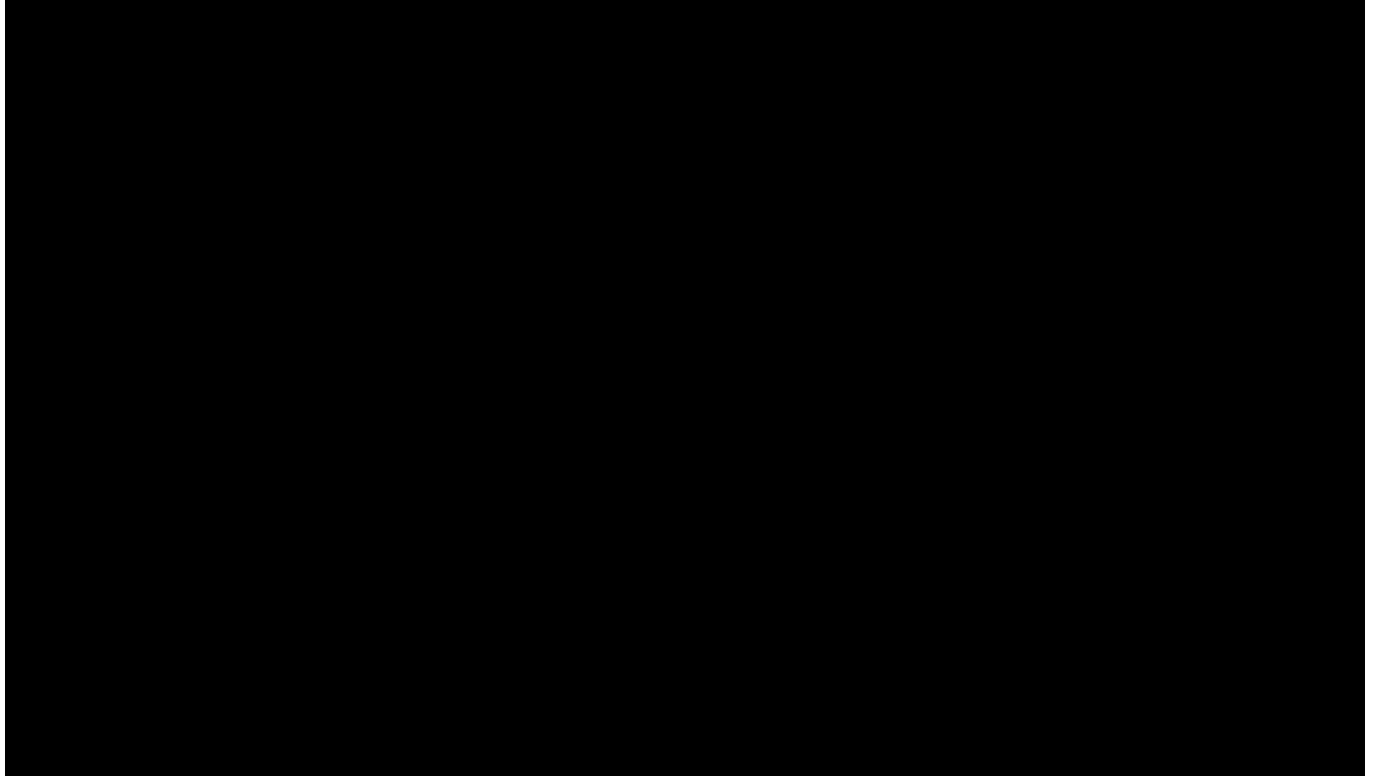
<sup>37</sup> FED017914\_0001.

<sup>38</sup> Appendix B to this report.

<sup>39</sup> *Ivy Deposition*. Pg. 11:17-19

<sup>40</sup> Celent. 2016. *NORTH AMERICAN POLICY ADMINISTRATION SYSTEMS PROPERTY & CASUALTY, GENERAL, AND SPECIALTY LINES ABCD VENDOR VIEW*. pg. 5. Boston MA.

94. Federal developed the policy administration systems; utility applications; and compliance applications that utilize Blaze and are shown in Diagram 2 below. The use of Blaze is summarized in column 2 of the Diagram and further explained below.



95. Each Federal insurance application described in this section has many software technologies and provides insurance processing functionality.<sup>42</sup> Blaze is not a policy administration system with insurance processing functionality. Blaze is a software technology that provides a rules management functionality to be integrated with insurance applications.<sup>43</sup> This means that Blaze is a single technology of these applications, which themselves form only a small part of Federal's overall business.

96. Federal's employees, agents and policy holders use Federal's insurance processing applications and are not aware that the underlying technology is from a third-party software provider. The user interface for each application does not distinguish between internally developed

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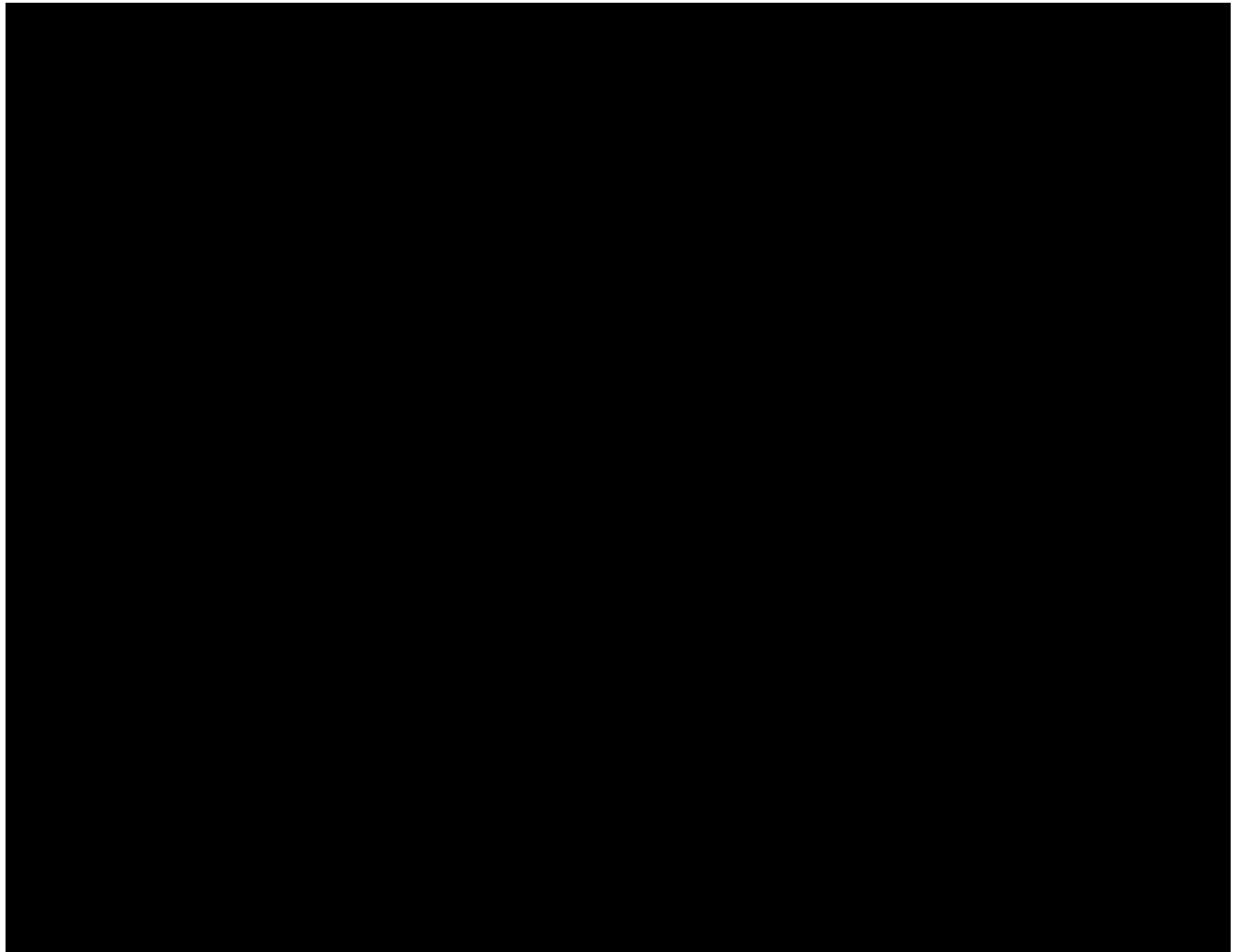
<sup>41</sup> Celent. 2016. *NORTH AMERICAN POLICY ADMINISTRATION SYSTEMS PROPERTY & CASUALTY, GENERAL, AND SPECIALTY LINES ABCD VENDOR VIEW*. pg. 5. Boston MA.

<sup>42</sup> Ivy Deposition. pg. 11:17-19

<sup>43</sup> *Id.*

software and third-party software unless contractually agreed to by both parties. It is common practice to use the insurance company branding for the user interfaces. Federal's insurance processing applications utilize Federal's branding unless a third-party software vendor required its branding on the user interface. Even when companies require its branding on the user interface, users of the system do not know the purpose for the branding and are not looking to an insurance application to understand the technologies one company used for the user experience.

97. CSI Express is a policy administration system supporting the quote, bind, booking, and issue functions for all new and renewal specialty insurance policies.<sup>44</sup> CSI Express was developed and owned by Federal. Diagram 3 shown below is a component view of CSI Express showing the applications internally developed and third-party technologies used by Federal for CSI Express.



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<sup>44</sup> *Mirollyuz Deposition*, pg. 44:1-25

**Diagram 3 – Component View of CSI Express**

98. CSI Express is 1 of Federal's 1500 applications.<sup>45</sup> Blaze is also 1 of 20 the Third-Party technologies used in CSI Express.

99. Blaze provides rules management and predictive analytics functionality to support predictive modeling, policy scoring and underwriter guidance within CSI Express. All of the required inputs, algorithms, and outputs for the predictive model were developed by Federal. All of the business rules for underwriter guidance were developed by Federal.

100. I may rely on additional component view charts of the remaining applications referenced in this matter to assist in demonstrating where Blaze is used as a technology to support the components of Federal's systems.

101. The remainder of the policy administration applications described below are variations of the CSI Express application with its own set of technologies tailored to the insurance product and the geographic market requirements. My understanding in speaking with Claudio Ghislanzoni, the Chief Enterprise Architect for Federal, is at least one of the remaining applications that use Blaze and has approximately 20 technologies that make up the system. The other applications have other technologies in addition to Blaze that make up the system.

102. Blaze is used as a single technology for business rules management in each of the applications described.

- Evolution (CAZ) is the policy administration system for the Federal Canadian Zone and was developed by Federal.<sup>46</sup> Blaze is used to process Federal's business rules for underwriting guidance for Canada. The rate, quote, bind, and issue functionality was provided by Federal.
- EZER - EZER is a commercial policy administration system that supports Executive Risk products for European Zone and was developed by Federal.<sup>47</sup> Blaze processes Federal's rules for renewal policy categorization.

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<sup>45</sup> FED006248\_0003.

<sup>46</sup> *Harkin Deposition*. pg. 28:11-16, Pandey Deposition. pg. 21:25, 22:1-8

<sup>47</sup> *Harkin Deposition*. pg. 53:22-24

- ADAPT-ABL is a browser-based policy administration system used in Australia and European Zone and was developed by Federal for Accident and Health products.<sup>48</sup> Adapt is no longer using Blaze.

C. Federal Utility Applications that use Blaze

103. Federal created the following utility applications to be used in conjunction with the policy administration systems. Blaze is a single technology of each application providing rules management functionality or predictive analytics. In all cases, Federal provided the business rules, formulas, and decisions for use by Blaze.

- Automated Renewal Processing (“ARP”) reduces the number of Federal Specialty Insurance policies coming up for renewal that require human intervention. This is a utility application used by CSI Express. There are two functions performed. ARP1 identifies the policies that need to be manually renewed and ARP2 submits policies that can be renewed automatically through policy underwriting and renewal functions within CSI Express.<sup>49</sup>
- DecisionPoint was developed by Federal and is a browser-based, point-of-sale, application that allows agents to access Federal’s quote, bind, and initiate booking and issuance of a policy for middle and small market insurance products for specialty insurance clients: Directors & Officers; Employment Practices Liability; Crime; and Fiduciary. Blaze processes Federal’s business rules for rate, pricing, eligibility determination, endorsement processing, and data normalization. Blaze is one technology of this Federal application.<sup>50</sup> This application is only used with CSI Express. Federal’s employees, agents and Brokers who access Decision Point are not aware that Blaze is used as single technology.
- Premium Booking was developed by Federal to more rapidly create the rules that assign policy premium to downstream databases and reporting systems. Blaze processes Federal’s validation rules as a technology of the Premium Booking application.<sup>51</sup>

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<sup>48</sup> *Harkin Deposition*, pg. 53:11-21

<sup>49</sup> *Miroluz Deposition*, pg. 53:8-15

<sup>50</sup> *Miroluz Deposition*, pg. 53:16-25

<sup>51</sup> FED000287\_0001. “Presentation for Premium Booking”.

- Commercial Underwriting Workstation (“CUW”) is an application that was developed by Federal. CUW has a technology called Inventory Management that was developed by Federal. Inventory Management is a clearing function to make sure the application for insurance is routed to the proper underwriter. It is a simple rules requirement and could be handled manually. Additionally, Blaze provides a predictive score functionality using Federal’s data, algorithms, and formulas.<sup>52</sup> An underwriter could handle this requirement with other tools; however because Blaze was there for one reason, Federal used it for scoring as well.

#### D. Federal Compliance Applications using Blaze

104. Federal created and owns the following compliance applications that are used for compliance management to comply with local insurance regulation.

- Texas Accident Prevention System (“TAPS”) is as application developed by Federal and allows Federal Commercial Insurance to monitor and report on compliance of individual workers’ compensation policies within state of Texas regulations. Blaze processes Federal’s rules for accident prevention compliance. The use of Blaze in TAPS is the track 1 element of the customer interaction for 1 line of business for 1 function in 1 state – Texas. Blaze is hardly critical to this business need. In discussing the operation with the operations team at Federal, they indicated that “we were not aware Blaze was involved” and “we could easily do this with a spreadsheet”.<sup>53</sup> Blaze is a technology of the TAPS application.<sup>54</sup>
- Individual Rate Modification Application (“IRMA”) was developed by Federal and allows Federal Commercial Insurance to manage use of individual policy rate modifications to ensure product and corporate requirements and restrictions for rate modifications are not violated.<sup>55</sup> Blaze provides rules management functionality.
- In summary, Federal developed and owns all of the 107 application systems. Federal provided the resources to develop the applications. Federal integrated Blaze with 10 of Federal’s 107 applications. Blaze is a technology that provides business rules

<sup>52</sup> *Mirollyuz Deposition*. pg. 57:24-25, 58:1-21

<sup>53</sup> Helen Mencke. Ellen Garnes. April 26, 2019. *Phone Interview*.

<sup>54</sup> *Mirollyuz Deposition*. pg. 61:23-25, 62:1-25, 63:1-2

<sup>55</sup> *Ivy Deposition*. pg. 24:3-8, 24:17-20

processing. Federal's insurance applications are Federal's intellectual property. Blaze had an indirect role in processing the insurance policies relating to these applications.

105. FICO is painting the picture that Blaze is a critical technology of Federal's ability to generate revenue and grow. Based on my experience with large multiple product global insurance companies, Blaze is a minor part of Federal's technology used to assist employees in better rules management. Federal's proprietary insurance applications are one of its core competencies.

#### **IX. FEDERAL LICENSED BLAZE AS THIRD-PARTY SOFTWARE**

106. It has been my experience that insurance companies develop insurance software internally and license third-party software for additional functionality. It has also been my experience that the insurance industry's standard licensing approach for third-party software is to charge a license fee, maintenance fee, and services fee for the use of its product. A standard license fee approach was used by FICO when it licensed the product to Federal.

107. During my tenure with the Allianz Group and Fireman's Fund Insurance company, I purchased the iLog business rules management software to integrate with commercial insurance policy administration systems. Fireman's Fund Insurance justified the purchase of iLog rules management system for potential efficiencies in rules management. As the chief information officer, I had the responsibility for the implementation of iLog.

108. I have developed and negotiated the business terms of license agreements for software with clients during my tenure with the following property and casualty insurance software companies:

- ePolicy Solutions – underwriting and policy administration software
- Insurity – underwriting and policy administration software (acquired ePolicy)
- MajescoMastek – underwriting policy administration software
- Mphasis - billing systems software and information technology services
- CGI Technologies – business rules management software, policy administration systems software, and information technology services

109. The license agreements were all based on a standard license fee, maintenance fee, and hourly rates for services. The type of licenses were based on departmental use and enterprise use. The license agreement were either annual term licenses or perpetual licensee agreements. The common approach as to sign a licensee agreement and a maintenance agreement. A services agreement would be used in the company needed assistance in implementing the software.

110. Insurance software companies often segment its target clients into various pricing tiers to maximize license fees.

111. Based on my review of the original license agreements and subsequent amendments between FICO and Federal in this case, the initial contracting arrangement and pricing seems consistent with the market pricing for business rules management software at that time.<sup>56</sup>

112. Federal paid significant license fees, maintenance fees, and services fees that would represent the maximum fee for a typical Tier 1 insurance carrier.<sup>57</sup>

113. Software is intended to make the business processing more efficient for human resources. FICO gets a licensee fee and maintenance fee in exchange for potential efficiencies in business rules management. Federal potentially benefits from the human resource efficiencies by using Blaze software.

114. Federal is not a software company. Federal would not profit from breaching its agreement with FICO as a software company. Federal's profits are from its insurance business.<sup>58</sup>

## **X. MY CONCLUSIONS**

115. Federal provided the following core competencies to conduct insurance business operations:

- Knowledge, expertise, and access to insurance markets
- Insurance product, business logic, and data
- Integration of individual technologies and production skills

116. Federal converted its core competencies into business rules and decisions that were used as input, algorithms, and output from Blaze in Federal's normal course of business.

117. FICO is a technology company that provided a technology software for business rules management and Blaze was integrated into 10 of Federal's 107 proprietary insurance applications that supported a small portion of Federal's business operations.

118. The business decisions regarding insurance policies were Federal's and were made by Federal either manually or through its automated business rules processing.

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<sup>56</sup> FED000046\_0001. "Software License and Maintenance Agreement Blaze Advisor"

<sup>57</sup> DOCUMENT SHOWING PRICING

<sup>58</sup> Chubb Limited. (2018). Annual Report. (2014-2018). Retrieved from [http://s1.q4cdn.com/677769242/files/doc\\_financials/2019/AGM/Chubb-Limited-2018-Annual-Report.pdf](http://s1.q4cdn.com/677769242/files/doc_financials/2019/AGM/Chubb-Limited-2018-Annual-Report.pdf)



119. Federal developed or contracted to have developed its proprietary insurance applications that use Blaze for rules management.

120. Federal's gross written premium revenue and profits are the result of Federal's insurance knowledge, expertise, and access to insurance markets; its insurance products, business logic, and data; and its complex harmonization of individual technologies and production skills used to conduct insurance business.<sup>59</sup>

121. Federal did not profit from the use of Blaze. Federal profits are from its core insurance business. Federal is not a software company and would not benefit as a software company from a software breach.

## **XI. RESPONSES TO MR. WHITENER'S EXPERT WITNESS REPORT**

122. Mr. Whitener's overall opinion is that Blaze contributed to gross written premium revenue generation and generated profits for Federal. I disagree with Mr. Whitener's opinion. Federal's revenue and profits are not attributable to Federal's use of Blaze.

123. My responses focus on each section of Mr. Whitener's expert report. I rely on the information contained in Mr. Whitener's report, information contained in my expert report, case related documents, my experience, education, and research. I reserve the right to amend my responses as expert discovery continues.

### **A. FICO's Blaze Advisor Decision Management Software<sup>60</sup>**

124. Mr. Whitener's expert report focuses on the importance of Decision Management software. Federal is using Blaze software which is the decision business rules management system technology of FICO's Decision Management Suite. Federal is not using all of the tools from FICO's Decision Management Suite which is a separate offering from FICO. My responses and opinions are related to the use of Blaze as a decision business rules management system.

125. Mr. Whitener highlights that FICO is the "world's leading business rules management system". This claim is from FICO's marketing material. My data indicates IBM is the leader in the

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<sup>59</sup> Hamel, G. Prahalad, C.K. (May-June 1990). The Core Competence of the Corporation. Harvard Business Review. Boston, MA. Pg. 7. (competence in products with access to markets...contribution to the end customer product...Harmonization of complex individual technologies and production skills".

<sup>60</sup> Mr. R. Bickley (Bick) Whitener. (2019 April 19). "Expert Report of R. Bickley (Bick) Whitener". (*Whitener Report*) pg. 4-6

business rules management systems market with 22.45% market share.<sup>61</sup> I disagree with the characterization that FICO is the world's leading provider of business rules management systems.

126. Mr. Whitener cites a power point slide as evidence that Blaze improves five business disciplines: Precision, Consistency, Agility, Speed and Cost.<sup>62</sup> Mr. Whitener goes on to indicate that by realizing these benefits, Blaze "thereby improves the revenue".<sup>63</sup> I do not agree that achieving these benefits improves revenue or results in revenue growth. The use of Blaze can cause insurance companies to lose premium revenue because the quality of the business rule decides whether a fast decision is a good decision. If Federal loads inaccurate business rules, the decision will not provide the intended results.

127. Mr. Whitener cites a Federal power point slide that highlights reasons for Federal adoption of Blaze.<sup>64</sup> The reasons are based on efficiencies and not based on revenue generation. Additionally, while these benefits are aspirational, there is no guarantee the benefits are realized. The reasons focus on speed of decision making, reducing time, reusing rules, reducing operational costs, elevating decisions, and increasing control of decisions. The efficiency benefits are only achieved if Federal's business rules are accurately implemented in Blaze.

128. It is my opinion, none of the efficiency benefits guarantee improvement in gross written premium revenue or revenue growth. I have seen no objective measures from Mr. Whitener that show this either. It has been my experience that efficiencies are targeted in advance, measured over time, and tied back to the actual use of software in terms of reduced hours or volumes processed. It has also been my experience that efficiencies are hard to monitor and manage without a significant up front effort to baseline the metrics that will be agreed upon between the software supplier and client.

129. Growing revenue requires core competencies that rely on people, processes and technology. To single out Blaze as the reason for improved revenue or revenue growth is misrepresenting the role of Blaze within Federal's business operation.

130. Mr. Whitener cites three companies that utilize Blaze for various benefits. Two of the companies are not insurance property and casualty insurance companies that are related to this

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<sup>61</sup> TechSciResearch. (2019). Global Business Rules Management Systems (BRMS). *Markets and Forecasts 2014-2024*. pg. 42. New York, NY..

<sup>62</sup> FED000270\_0012.

<sup>63</sup> *Whitener Report*. pg. 5

<sup>64</sup> FED000275\_0005.

case. I assume Mr. Whitener is trying to demonstrate the benefits of using Blaze in those industries. Avia example is a health insurer and Dell is a technology company.<sup>65</sup> Both examples are not property and casualty insurance companies and have a different business model than Federal.

131. Mr. Whitener cites the Auto Club Group example as a large auto insurer in Michigan which focuses on processing efficiency in insurance as the benefit that indirectly led to revenue growth.

<sup>66</sup>My assumption is Auto Club developed its own business rules and loaded them into Blaze similar to Federal's approach using Blaze. If my assumption is correct, I would disagree that Blaze contributed to revenue growth. My opinion is the Auto Club core competency in the insurance market with knowledge and expertise converted to business rules is what contributed to revenue and growth. My opinion is that Blaze had an indirect role in processing the business rules of Auto Club.

#### B. Blaze Advisor Contributions to Gross Written Premium<sup>67</sup>

132. Mr. Whitener outlines the use of Blaze in several strategic applications at Chubb. Mr. Whitener goes on to say that Blaze is used by these applications to achieve the following benefits:<sup>68</sup>

- Increasing speed of response...
- Increasing speed of making renewals...
- Increasing speed of new product introduction...
- Increasing speed of product changes...
- Increasing speed to market...
- Increasing precision and accuracy...
- Reducing time for agents and brokers...
- Reducing time for underwriters...
- Improving accuracy of underwriters...

133. In my opinion, the benefits Mr. Whitener provide depend, as I have stated previously, on the quality and accuracy of the business rules that Federal loads into Blaze. Federal develops and owns the Business Rules loaded into Blaze that are processed to come to a decision. Federal takes sole responsibility for the decisions and quality of the decision. FICO does not take responsibility

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<sup>65</sup> *Whitener Report*, pg. 6

<sup>66</sup> *Whitener Report*, pg. 7

<sup>67</sup> *Whitener Report*, 7-12

<sup>68</sup> *Id.*

for Federal's Business Rules and decisions processed by Blaze. An incorrect business rule loaded into Blaze will lead to a incorrect decision out of Blaze.

134. Even if Federal loads accurate business rules into Blaze, the benefits are efficiencies in labor. Blaze is not attributable to the gross written premium or profits. Federal makes all the decisions that lead to revenue and profit.

C. Chubb & Son, a Division of Federal Insurance Co., Licensed Blaze Advisor to Aid in its Expansion of Under Penetrated Specialty Markets

135. Mr. Whitener suggests that Blaze allowed Chubb to access under penetrated specialty markets. Federal developed its proprietary business plan and technology plan to support access to under penetrated specialty markets on its own. FICO was not involved in the development of Chubb's business plan. Blaze was identified as part of the technology plan that was being considered for Federal's new business opportunity. Federal provided all the people, processes, and technology to support the business plan. Blaze was already in use by Federal to manage the rules associated with the insurance policy processing for specialty markets. A decision to use or not to use Blaze would not have affected Federal's plans for under penetrated specialty markets.

136. As I have previously stated, it is Federal's knowledge and expertise in insurance, Federal's customized insurance business processes, and Federal's proprietary insurance business applications that enable its business planning and revenue growth. In my opinion, singling out Blaze or any software as the reason for Federal's expansion in under penetrated specialty markets is mispresenting Blaze's role in Federal's insurance processing systems.

D. Chubb's Use of Blaze Advisor Contributes to Gross Written Premium

137. In this section of Mr. Whitener's expert witness report he provides a description of each Federal proprietary insurance applications that utilizes Blaze and claims that Blaze contributed to gross written premium<sup>69</sup>. Mr. Whitener uses examples of Blaze handling new business policies, renewal policies, rate changes, and claim scoring as examples. Whitener overstates the role of Blaze in these applications and also overstates the role of these applications in Federal's larger business.

138. The insurance processing applications Mr. Whitener describes are all Federal's proprietary insurance processing applications that Federal designed, developed, and implemented to perform

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<sup>69</sup> *Whitener Report*. pg. 14-35

insurance processing functionality. The functionality Mr. Whitener highlights came from the minds of Federal's insurance experts. Blaze does not provide insurance processing functionality.

<sup>70</sup> FICO does not provide insurance expertise. <sup>71</sup>

139. Federal integrated Blaze with its applications to provide rules management efficiencies. Mr. Whitener highlights the efficiencies Blaze provided to Federal as the reason for premium revenue improvement or revenue growth. I disagree with Mr. Whitener's assumption that the efficiencies are what improved revenue or premium growth for Federal. In my opinion, it is Federal's core competencies, which FICO and Blaze do not offer, that are responsible for improved revenue and revenue growth.

140. As I have stated previously, processing efficiencies as highlighted by Mr. Whitener do not directly translate to improved premium revenue or revenue growth. Based on my experience, there are many activities and technologies required to generate gross written premium revenue and revenue growth which FICO does not provide.

#### E. Overview of the Insurance Industry

141. Mr. Whitener provides an overview of the insurance industry to explain where insurance companies generate revenue and make profits. Mr. Whitener also provides a view into how the market is segmented and where Federal fits in the market. Mr. Whitener also provides an overview of the insurance products that Federal offers in the market. Mr. Whitener explains the commercial and specialty subsegments of the insurance markets and Federal's alignment to these subsegments.

142. Mr. Whitener highlights that "the Chubb [Federal] website does not differentiate between Commercial: Lines and Specialty Lines". <sup>72</sup> Federal, on its website, lists all products that are for businesses on the same web page to allow Chubb Federal business customers to choose the products that best fits its business model. Specialty is a type of commercial insurance for businesses.

143. Based on Mr. Whitener's insurance experience, he would know that internally within Federal, the business products are segmented into Commercial or Specialty for accounting and processing as the products require very different internal handling.

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<sup>70</sup> *Ivy Deposition*. pg. 23:23-25.

<sup>71</sup> *Ivy Deposition*. pg. 22:24-25

<sup>72</sup> *Whitener Report*. pg. 42:121

#### F. Strategies for Insurance Company Growth

144. Mr. Whitener outlines five strategies an insurance company can deploy to grow premium revenue.<sup>73</sup>

- Execute mergers and acquisitions
- Raise prices
- Find new customers
- Sell more existing products
- Introduce new products

145. In my opinion, these are generic business strategies that any business would use, not just insurance. Mr. Whitener highlights that technology influences these strategies. It has been my experience that technology always plays a supporting role in business processing by making human tasks more efficient; however, technology does not replace the core competency required to operate an insurance business. Calculators influenced the insurance business as a tool in business operations. Excel influenced the insurance business as a tool to improve on calculators; Decision engines like Blaze influence the business as a tool for rule management. In my opinion, these technologies improved the efficiency of humans; however the technologies are not responsible for business results. The technology takes input from humans and return answers based on the business rules that are entered.<sup>74</sup>

146. Mr. Whitener goes on to describe each of the five strategies and, in my opinion, tries to paint a picture that Blaze had a direct role in Federal achieving these strategies. I disagree with his conclusions regarding Blaze contribution to the strategies of Federal.

147. Federal has published its growth strategies in its annual report.<sup>75</sup> Blaze did not have a role in the development of Federal's growth strategies. In my opinion, trying to tie Federal's growth strategies to Blaze is exaggerating the role that Blaze provided in Federal's insurance processing systems and overall business operation.

#### G. Role of Software and Technologies in Insurance

148. This section focused on the role and benefits of technology in insurance and the need to make smart data-driven decisions.

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<sup>73</sup> *Whitener Report*, pg. 47:132-133

<sup>74</sup> Ivy Deposition, pg. 24:3-8, 24:17-20

<sup>75</sup> Chubb Limited. (2018). Annual Report. Pg. 8-14. Retrieved from [http://s1.q4cdn.com/677769242/files/doc\\_financials/2019/AGM/Chubb-Limited-2018-Annual-Report.pdf](http://s1.q4cdn.com/677769242/files/doc_financials/2019/AGM/Chubb-Limited-2018-Annual-Report.pdf)

149. Federal is not using the full decision management suite and therefore not realizing all of the efficiency benefits Mr. Whitener outlines. Federal is using Blaze Advisor which is a technology of FICO's Decision Management Suite.<sup>76</sup> According to FICO's website, the Decision Management Suite is a separate offering from Blaze Advisor Decision Rules Management System.

150. Mr. Whitener includes a quote from Mark E. Watson, III, CEO of Argo Group that that insurance companies must have "judicious use of cutting edge technology combined with insurance expertise".<sup>77</sup> This quote reinforces my opinion that it takes more than technology to generate results for a business. Mr. Watson highlights the combined role of technology with insurance expertise which is only found in the human resources in Federal.<sup>78</sup>

151. It is my opinion that technology on its own does not contribute to improved revenue and revenue growth. It requires the insurance business knowledge from the business users and technology that has insurance processing functionality. To generate revenue and grow revenue requires a set of core competencies in the insurance industry.<sup>79</sup>

152. Mr. Whitener attempts to show the dependency on decision management in underwriting and cites an article by an employee of Guidewire, a competitor to Blaze.<sup>80</sup> Ms. Nicole Mongillo, the author of the article, went on to say that "what's needed for accurate, efficient underwriting is more complex than either a human or machine, it's a combination of both".<sup>81</sup> Mongillo recognizes that technology alone will not support the core function of insurance underwriting. She argues that it takes the business knowledge that insurance experts provide to actually generate business results. Mr. Whitener omitted the need for Federal insurance expertise as part of his conclusion.

153. Mr. Whitener provides information about the future of underwriting and use of artificial intelligence. Federal is only using the business rules engine of Blaze and is not using any artificial intelligence capability of FICO's Decision Management Suite. Artificial intelligence technology does not apply in this matter.

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<sup>76</sup> FICO. (2019). Product. (*Decision Management*). <https://www.fico.com/en/products?category=646>

<sup>77</sup> *Whitener Report*. pg. 53:154

<sup>78</sup> *Whitener Report*. pg. 53:154

<sup>79</sup> Hamel, G. Prahalad, C.K. (May-June 1990). The Core Competence of the Corporation. Harvard Business Review. Boston, MA. Pg. 7. (competence in products with access to markets...contribution to the end customer product...Harmonization of complex individual technologies and production skills".

<sup>80</sup> *Whitener Report*. pg. 55-56:158

<sup>81</sup> *Whitener Report*. pg. 56. "...its becoming quite clear that what's needed for accurate, efficient underwriting is more complex than either human or machine. It's a combination of both".



154. It is my opinion that Federal's gross written premium revenue and profits are the result of Federal's knowledge and expertise in the insurance industry, Federal's customized insurance business processes, and Federal's proprietary insurance business applications which it developed and owns. Blaze is a technology that was used improve the management of Federal's business rules and decision making processes within certain applications.

Dated: May 17, 2019

A handwritten signature in dark ink, reading "William S. McCarter". The signature is fluid and cursive, with a horizontal line extending from the end of the name.

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William S. McCarter

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## XII. APPENDICES

### APPENDIX A – FEDERAL THIRD PARTY SOFTWARE USAGE

The following list of Third Party Software is licensed and used as technologies to develop and implement applications within Federal. Blaze is 1 of these technologies. Federal internally developed computer code and used various Third-Party technologies to build and implement the 10 Federal applications that use Blaze..<sup>82</sup>

1. JAVA – for internal development
2. WINDOWS – operating system
3. UNIX®/AIX ® – operating system
4. HTML ®– web development
5. JavaScript – internal development
6. Informatica – data extract, transformation, and loading
7. TURNSTYLE - provides customer analytics and location-based marketing
8. DUCKCREEK Rating - rules engine
9. .Net - development for windows applications
10. SQL/ADO - core data access technology for .NET languages
11. COBOL – internal development
12. CICS ® – internal development
13. JCL – operations process scripting
14. COOL Gen - Computer Aided Software Engineering application development environment
15. TELON™ - application generator to define mainframe programs, creating the underlying code
16. BIZTALK – business transaction development engine
17. WebSphere ® Process Server – application and integration middleware
18. DATAPOWER - integration software
19. ACTIVE DIRECTORY - directory service for the Windows domain networks
20. Oracle Identity Manager (OIM) – analysis of raw data
21. Entrust GetAccess - for Security
22. MDM & Client/WIP - for Customer Management

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<sup>82</sup> Ramesh Pandey. Email dated April 26, 2019. *Third Party Software*.

23. Agencyport – main application for agent interaction
24. APPDYNAMICS - for monitoring applications
25. BIG-IP - for clustering/load balancing
26. AS/400™ & RPG™ - for Registration
27. ACCUITY™ - for AML/Economic Sanctions
28. SSIS - for data extract, transform, and load functions,
29. Cognose - reporting
30. QlickView - for reporting
31. Datalake - for Analytics
32. PeopleSoft - for General Ledger
33. SaaS - for predictive modeling
34. Python - for predictive modeling,
35. Oracle- for Database Management
36. DB2- for Database Management
37. SQL- for Database Management
38. Informix - for Database Management
39. Telon and Coolgen - for mainframe screen and logic
40. SmallTalk for business logic and rules for some user interfaces
41. ARCGIS - for Geocoding
42. ASP - for User Interface development
43. JSP - for User Interface development
44. DuckCreek – policy administration system
45. FICO Blaze – business rules management

## APPENDIX B – THE CORE COMPETENCE OF THE CORPORATION

155. It is my opinion that technology supports business operations by improving the efficiency of human tasks and activities. Technology does not replace the core competencies that are required to operate a business and deliver financial results.

156. The core competencies required to operate a business are outlined in the Harvard Research Article on “The Core Competence of the Corporation”.<sup>83</sup> Federal has all the core competencies to operate its insurance business. FICO’s core competency is in the technology marketplace providing software to support its customers. FICO does not have a core competency in insurance.

157. There are three tests to determine a company’s core competencies:

- “First, a core competence provides potential access to a wide variety of markets”.<sup>84</sup> Competence in the insurance industry enables Federal to sell and service insurance products and participate in the insurance markets globally. FICO does not have this competence. FICO sells technology products that are industry agnostic.
- “Second, a core competence should make a significant contribution to the perceived customer benefits of the end product”.<sup>85</sup> Federal provides financial protection from loss to the end customers (policy holders). FICO does not provide any significant customer benefits to Federal policy holders. FICO takes no risk on insurance policies processed using Blaze.
- “Finally, a core competence should be difficult for competitors to imitate”.<sup>86</sup> Federal has unique insurance policies and expertise in its employees that provide its production skills. FICO provides no insurance knowledge or business rule content.

158. Based on my experience in developing, implementing, purchasing, and supporting technology over the last 34 years, technology has provided a supporting role in business. I also know, that one technology is not responsible for delivering the financial results of an insurance company.

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<sup>83</sup> Hamel, G. Prahalad, C.K. (May-June 1990). The Core Competence of the Corporation. pg. 7. Harvard Business Review. Boston, MA.

<sup>84</sup> *Id.*

<sup>85</sup> *Id.*

<sup>86</sup> *Id.*

## APPENDIX C: LIST OF MATERIALS REVIEWED

### Discovery Documents:

- Complaint and Related Exhibits, dated 04/21/2016
- Amended Complaint, dated 02/01/2017
- FICO's First Set of Requests for Production of Documents to Defendant, dated 04/11/2017
- FICO's First Set of Interrogatories to Defendant, dated 04/ 11/2017
- FICO's First Set of Requests for Admission to Defendant, dated 04/11/2017
- Federal's Answers to Plaintiff's First Set of Interrogatories, dated 05/11/2017
- Federal's Response to Plaintiff's First Set of Requests for Admission, dated 05/11/2017
- Federal's Response to Plaintiff's First Set of Requests for Production of Documents, dated 05/11/2017
- FICO's Answers to Defendant's First Set of Interrogatories, dated 05/18/2017
- FICO's Responses to Defendant's Requests for Production of Documents, dated 05/18/2017
- Federal's Supplemental Answers to Plaintiff's First Set of Interrogatories, dated 06/15/2017
- FICO's Answers to Defendant's First Set of Interrogatories, dated 08/16/2017
- FICO's Second Set of Requests for Admission to Defendant Federal Insurance Company, dated 12/29/2017
- FICO's Second Set of Requests for Production of Documents to Defendant Federal Insurance Company, dated 12/29/2017
- FICO's Second Set of Interrogatories to Defendant Federal Insurance Company (15-21), dated 12/29/2017
- Federal's Response to Plaintiff's Second Set of Requests for Admission, dated 01/29/2018
- Federal's Answers to Plaintiff's Second Set of Interrogatories (15-21), dated 01/29/2018
- Federal's Response to Plaintiff's Second Set of Requests for Production of Documents, dated 01/29/2018
- FICO's Second Supplemental Answers to Defendant's Interrogatory Nos. 6-9, dated 04/23/2018
- Federal's Second Supplemental Answers to Interrogatory Nos. 2, 3, and 4, dated 05/25/2018
- Federal's Second Supplemental Answer to Interrogatory No. 6 and Supplemental Answer to Interrogatory No. 21, dated 06/07/2018
- Federal's Second Supplemental Answers to Interrogatory Nos. 2, 3, and 4, dated 06/21/2018
- Federal's Second Supplemental Answer to Interrogatory No. 6 and Supplemental Answer to Interrogatory No. 21, dated 07/30/2018
- Second Amended Complaint, dated 09/11/2018
- Answer to Second Amended Complaint and Counterclaim, dated 10/10/2018
- Federal's Supplemental Answer to Interrogatory No. 20, dated 10/24/2018
- Federal's Supplemental Answer to Interrogatory No. 17, dated 10/26/2018
- Federal's Supplemental Answer to Interrogatory No. 19, dated 10/26/2018

- Federal's Supplemental Answer to Interrogatory No. 18, dated 10/26/2018
- FICO's Memorandum in Support of Motion to Compel, dated 11/13/2018
- Letter from Christopher D. Pham, dated 12/31/2018
- Federal's Second Supplemental Answer to Plaintiff's Interrogatory No. 16, dated 01/21/19
- Federal's Third Supplemental Answer to Plaintiff's Interrogatory No. 17, dated 01/21/19
- Federal's Fourth Supplemental Answer to Plaintiff's Interrogatory No. 18, dated 01/21/19
- Federal's Third Supplemental Answer to Plaintiff's Interrogatory No. 19, dated 01/21/19
- Federal's Third Supplemental Answer to Plaintiff's Interrogatory No. 20, dated 01/21/19
- Federal's Third Supplemental Answer to Plaintiff's Interrogatory No. 16 and Fourth Supplemental Answer to Plaintiff's Interrogatory No. 17, dated 02/28/2019
- Federal's Fourth Supplemental Answer to Plaintiff's Interrogatory No. 19, dated 02/28/2019
- Federal's Supplemental Responses to Plaintiff's Fourth Set of Requests for Production of Documents, dated 03/04/2019
- Federal's Fifth Supplemental Answer to Plaintiff's Interrogatory No. 16 and Sixth Supplemental Answer to Plaintiff's Interrogatory No. 17, dated 03/21/2019
- Federal's Fifth Supplemental Answer to Plaintiff's Interrogatory No. 18, dated 03/21/2019
- Federal's Sixth Supplemental Answer to Plaintiff's Interrogatory No. 20, dated 03/21/2019

#### Deposition Transcripts & Deposition Exhibits:

- Ramesh Pandey, taken 11/13/18 & exhibits 146-177 and exhibit 6
- Ramesh Pandey, taken 01/22/19 & exhibits 271-290
- 30 (b)(6) of Henry Mirolyuz, taken 07/31/18 & exhibits 1-14
- Henry Mirolyuz, taken 01/11/19 & exhibits 178-219
- 30 (b)(6) of William Waid, taken 01/16/2019 & exhibits 82, 97, 99, 104-113, 125, 220-236
- John Taylor, taken 08/02/2018 & exhibits 18-45
- Chris Ivey, taken 03/14/2019 & exhibits 52, 54, 60, 120, 239, 338-382
- 30(b)(6) of William Waid, taken 04/02/2019 & exhibits 419-433, 435-443, 82, 110, 230, 257, 259, 266
- Tamra Pawloski, taken 01/18/2019 & exhibits 237-270
- Kevin Harkin, taken 03/25/2019 & exhibits 158, 403-418
- Oliver Clark, taken 09/11/2018 & exhibits 46-70
- Michael Sawyer, taken 10/2/2018 & exhibits 47, 54, 63, 65, 69, 71-84
- Thomas Carretta, taken 10/09/2018 & exhibits 47, 60, 80, 85-104
- Russell Schreiber, taken 10/24/2018 & exhibits 105-145
- Benjamin Baer, taken 01/29/2019 & exhibits 191-193, 291-295
- Chris Ivey, taken 01/30/2019 & exhibits 296-301
- Jandeen Boone, taken 02/06/2019 & exhibits 305-330
- Lawrence Wachs, taken 02/26/2019 & exhibits 331-337

- Chris Ivey, taken 03/14/2019 & exhibits 52, 54, 60, 120, 239, 338-382

Documents Produced by Federal Insurance Company:

- FED000046\_0001-FED000046\_0016
- FED000049\_0001-FED000050\_0002
- FED000064\_0001-FED000064\_0030
- FED000068\_0001-FED000068\_0028
- FED000070\_0001-FED000070\_0013
- FED000077\_0001-FED000077\_0027
- FED000081\_0001-FED000081\_0025
- FED000112\_0001-FED000112\_0068
- FED000122\_0001-FED000122\_0029
- FED000127\_0001-FED000127\_0004
- FED000141\_0001-FED000141\_0004
- FED000143\_0001-FED000143\_0006
- FED000171\_0001-FED000171\_0028
- FED000185\_0001-FED000185\_0007
- FED000190\_0001-FED000190\_0009
- FED000195\_0001-FED000195\_0002
- FED000243\_0001-FED000243\_0024
- FED000252\_0001-FED000252\_0015
- FED000255\_0001-FED000255\_0034
- FED000259\_0001-FED000259\_0026
- FED000270\_0001-FED000270\_0065
- FED000275\_0001-FED000275\_0016
- FED000278\_0001-FED000278\_0153
- FED000280\_0001-FED000280\_0016
- FED000287\_0001-FED000287\_0019
- FED000289\_0001-FED000289\_0024
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- FED000342\_0001-FED000342\_0003
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- FED000755\_0001-FED000755\_0001
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- FED001101\_0001-FED001101\_0002
- FED001104\_0001-FED001104\_0018
- FED001151\_0001-FED001151\_0002
- FED001164\_0001-FED001164\_0002
- FED001180\_0001-FED001180\_0002
- FED001289\_0001-FED001289\_0004
- FED001311\_0001-FED001312\_0021
- FED001314\_0001-FED001314\_0021
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- FED003261\_0001-FED003261\_0001
- FED003339\_0001-FED003339\_0001
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- FED004079\_0001-FED004079\_0027
- FED004431\_0001-FED004431\_0003
- FED004434\_0001-FED004437\_0001
- FED004458\_0001-FED004458\_0002
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- FED004524\_0001-FED004527\_0003
- FED004531\_0001-FED004531\_0002
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- FED004549\_0001-FED004550\_0003
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- FED004790\_0001-FED004790\_0021
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- FED004946\_0001-FED004946\_0007
- FED005053\_0001-FED005053\_0002
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- FED005221\_0001-FED005221\_0012
- FED005307\_0001-FED005307\_0056



- FED005476\_0001-FED005476\_0016
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- FED006246\_0001-FED006246\_0027
- FED006248\_0001-FED006248\_0013
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- FED006504\_0001-FED006504\_0013
- FED006662\_0001-FED006662\_0032
- FED006784\_0001-FED006784\_0038
- FED006995\_0001-FED006995\_0024
- FED007235\_0001-FED007235\_0032
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- FED008650\_0001-FED008650\_0014
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- FED009056\_0001-FED009056\_0033
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- FED011959\_0001-FED011959\_0002
- FED012128\_0001-FED012128\_0014
- FED012130\_0001-FED012130\_0021
- FED013515\_0001-FED013520\_0343
- FED013521\_0001-FED013537\_0292
- FED013555\_0001-FED013629\_0056
- FED013839\_0001-FED013839\_0018
- FED014277\_0001-FED014277\_0006
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- FED016602\_0001-FED016602\_0013
- FED016653\_0001-FED016653\_0015

- FED016737\_0001-FED016737\_0003
- FED017176\_0001-FED017176\_0011
- FED017220\_0001-FED017243\_0010
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- FED017886\_0001-FED017886\_0001
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- FED017882\_0001-FED017886\_0001

Documents Produced by FICO:

- FICO00000005
- FICO00000055
- FICO00000057-FICO00000058
- FICO00000060-FICO00000061
- FICO00000193-FICO00000194
- FICO00000198-FICO00000199
- FICO00000259-FICO00000261
- FICO00000275-FICO00000278
- FICO00000307-FICO00000324
- FICO00000381
- FICO00000461-FICO00000462
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- FICO00000657-FICO00000659
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- FICO00000971
- FICO00001381
- FICO00001424-FICO00001425
- FICO00001576-FICO00001577
- FICO00001882-FICO00001883
- FICO00001903-FICO00001909
- FICO00001916-FICO00001918
- FICO00001923-FICO00001924
- FICO00002036-FICO00002057
- FICO00002804
- FICO00002842-FICO00002846

- FICO0002965
- FICO0004656-FICO0004658
- FICO0005621-FICO0005898
- FICO0005981-FICO0005982
- FICO0052649-FICO0057179
- FICO0057181-FICO0057205
- FICO0057207-FICO0057260
- FICO0057262-FICO0057273
- FICO0057280-FICO0057306
- FICO0057921-FICO0059475

## EXTERNAL REFERENCES

- AM Best. (2019, January 6). AM Best Ranks United Health Group and Allianz World's Largest Insurers. Business Wire. Retrieved from <https://www.businesswire.com/news/home/20190107005617/en/Ranks-UnitedHealth-Group-Allianz-World%E2%80%99s-Largest-Insurers>
- Carnahan, K., & Light, D. (2016). *NORTH AMERICAN POLICY ADMINISTRATION SYSTEMS*. Property & Casualty, General, and Specialty Lines ABCD Vendor View, pg. 5. Celent. Boston MA.
- Chubb Limited. (2019, April 30). About Us. *Who we are*. Retrieved from <https://www.chubb.com/us-en/about-chubb/>
- Chubb Limited. (2019, April 30). Business Insurance. Retrieved from at <https://www.chubb.com/us-en/business-insurance/>
- Chubb Limited. (2019). Annual Report. 2018 Chubb Annual Report. Retrieved from <http://investors.chubb.com/investor-relations/financials/annual-reports/default.aspx>
- Clark, W., Driver, M., Scuulte, R. W., Dunie, R. (2019, May 8). Innovation Tech Insight for Business Rules Management Systems. Gartner. Stamford, CT.
- Deitert, E., McCoy, D. W. (2007, September 28). The Anatomy of a Business Rule Management System. Gartner. Stamford, CT.
- FICO. (2019, April 29). Products. "Make faster, more consistent business decisions...Reduce time to market... Reduce total cost of ownership". Retrieved from <https://www.fico.com/en/products/fico-blaze-advisor-decision-rules-management-system>
- FICO. (2019). Product Details. *Product Overview*. Located at <https://www.fico.com/en/products/fico-blaze-advisor-decision-rules-management-system>
- FICO. (2019). FICO Decisions Technologies. Retrieved from <https://www.fico.com/en/latest-thinking/product-sheet/fico-decision-technologies>
- FICO. (2012, October 15). Blaze Advisor 7.1 Gives Business Users Unprecedented Power to Manage Their Own Business Rules. Retrieved from <https://www.fico.com/en/newsroom/fico-blaze-advisor-71-gives-business-users-unprecedented-power-to-manage-their-own-business-rules-10-15-2012>
- IBM. (2012). IBM Industry Models for Insurance. Business Activity Model. Downloaded from [ftp://public.dhe.ibm.com/software/data/sw-library/industry-models/brochures/IBM\\_Insurance\\_IAA\\_Warehouse\\_GIMv85.pdf](ftp://public.dhe.ibm.com/software/data/sw-library/industry-models/brochures/IBM_Insurance_IAA_Warehouse_GIMv85.pdf)
- Hamel, G. Prahalad, C.K. (May-June 1990). The Core Competence of the Corporation. Harvard Business Review. Boston, MA.
- Insurance Information Institute (2019, April 30). Commercial Insurance Introduction. Retrieved from <https://www.iii.org/publications/commercial-insurance/introduction>
- Kearney, Susan J. (2013). *Insurance Operations*. (2<sup>nd</sup> ed.). Malvern, PA. American Institute of Certified Property and Casualty Underwriters (AICPCU). The Institutes.

TechSciResearch. (2019). Global Business Rules Management Systems (BRMS). *Markets and Forecasts 2014-2024*. New York. NY.

Trustradius. (2019 April 30, 2019). What is Business Rules Management Systems (BRMS)?. Retrieved from <https://www.trustradius.com/business-rules-management-brms>

Vincent, P. Driver, M. Wong, J. (2007, September 28). The Anatomy of a Business Rule Management System. Gartner. Stamford, CT.

## APPENDIX D - RESUME OF WILLIAM S. MCCARTER

### **BRICLYN ADVISORY SERVICES, L.L.C, Fernandina Beach, FL – April 2018 to Present**

Founder, President and Principal Consultant

Focusing on helping insurance carriers IT organizations and insurance solution providers transition to digital business models. Primary consulting services include strategic planning, transformational outsourcing, and solution strategy. Significant experience in the following areas:

- IT organization and operations including application systems and infrastructure operations
- Insurance solution development and delivery
- Program and project management
- Product strategy for insurance solution providers including marketing, management, and engineering
- Consulting and due diligence for insurance technology mergers and acquisitions.
- Senior Advisor for FOCUS Bankers (<https://focusbankers.com/teammember/william-mccarter/> )
- Expert witness for insurance technology domain litigation via Thomson Reuters Expert Witness Program ( <https://www.trexpertwitness.com/practice-areas/insurance-litigation/> )

### **CGI TECHNOLOGIES, Montreal, Canada - May 2014 – April 2018**

Vice President, Insurance Solutions Group

Responsible for the insurance solutions and services business in the U.S. and for the global sales of the rating and pricing solution. Results include:

- P&L responsibility for insurance solutions and services business including product management, marketing, distribution, business development, sales, and delivery.
- Developed and implemented the strategic plan for five insurance lines of business:
  - Ratabase Rating and Pricing
  - Edge Policy Administration
  - Inside Out Policy Administration
  - IF360 Policy Administration
  - Insurance Management Consulting
- Identified, negotiated, and implemented channel partnerships and reseller agreements
- Increased sales for new business and expanded relationships for strategic accounts
- Develop business case and raised capital for investment in digital strategy for dynamic rating and pricing solution
- Built the pipeline for potential acquisitions of insurance software and service firms and participated in due diligence for these opportunities as required

### **MPHASIS, New York, NY - October 2012 – May 2014**

Vice President, Insurance Consulting and Strategic Alliances

Responsible for the strategy, development, and implementation of insurance solutions and strategic alliances for the insurance vertical.

- Developed the business case and launched a global insurance consulting practice
- Developed and executed the go-to-market strategy and plan for Billing as a Service (BaaS) and Insurance Sales Modernization solutions for the Property & Casualty market
- Business development and sales for existing and new business including the retention of existing large contracts

#### **DELL SERVICES, Plano, TX - December 2010 – October 2012**

Services Executive, Large Enterprise Financial Services

Responsible for business development and sales to strategic Life and Annuity insurance accounts. Results include:

- IT outsourcing and third party administration (TPA) for life, annuity, and specialty health products
- Signed closed block processing deals worth \$15 million annually
- Developed and maintained pipeline of strategic pursuits of \$450 million
- Client engagement manager for strategic deals

#### **MAJESCOMASTEK INC, New York, NY - March 2007 – November 2010**

Senior Vice President, Global Delivery Executive, North America (October 2009-October 2010)

President MajescoMastek (April 2007- October 2009)

As Global Delivery Executive for North America, I had responsibility for all aspects of the services delivery for clients in North America. Results include:

- Managed delivery of services to Property, Casualty, Life, Annuity, Capital Markets, and High Tech
  - Services P&L revenue target of \$70 million and ended the year with \$73 million
- Delivery of services using a global delivery model
- Monitoring and managing order backlog and translating backlog to execution
- Insuring proper staffing for signed contracts and positioning resources for new business

As President of MajescoMastek, I had responsibility for all aspects of the insurance business. Results include:

- Grew business from \$17 million to \$25 million in 16 months
- Led the acquisition and integration for Systems Task Group and Vector Insurance Services to establish a footprint in the Property, Casualty, and Life insurance market in the U.S.
- Developed business strategy and go-to-market strategy for all insurance lines of business
- Led product engineering, product marketing, and product management, business development, sales, marketing, delivery, finance, human resources



**EPOLICY SOLUTIONS INC, Torrance, CA - December 2002 – March 2007**

Vice President and General Manager, Insurity (June 2006 – March 2007)

Executive Vice President, Chief Operating Officer, ePolicy (January 2004 – June 2006)

Senior Vice President, Client Engagement Executive, ePolicy (December 2002 – January 2004)

Joined ePolicy as Senior Vice President of Professional Services and subsequently promoted to Executive Vice President and Chief Operating Officer. Launched a major transformation of the company to become a competitor in the P&C Insurance technology solutions market. After successfully building the RightRisk product and establishing a client base, hired an investment banker and sold the company. I led the company through the acquisition by Insurity (ChoicePoint) and became a member of the Insurity executive team. Results include:

- Launched and managed a successful transformation of ePolicy Solutions from a custom software delivery company to a leading software solution provider for P&C with 2005 revenues of \$25 million.
- Improved the profit margin 20% by lowering operating expenses while maintaining high quality deliverables through off shoring of development and client implementations
- Recruited and staffed a technology product management and engineering organization
- Led the design and development of the company's core product solution (RigtRisk) and launched the product within 18 months.
- Delivered value to the shareholders by successfully selling ePolicy Solutions to Insurity in June 2006.

**THE ALLIANZ GROUP, Munich, Germany**

**FIREMANS FUND INSURANCE COMPANY, Novato, CA**

**September 1997–**

**December 2002**

Vice President, Systems Executive, Personal Insurance (September 1997 –December 1999)

Senior Vice President, Chief Information Officer (January 2000 – December 2002)

Senior Vice President, Regional CIO, Allianz North America (January 2000 -December 2002)

Joined Fireman's Fund, a subsidiary of Allianz Group, as VP of IT for Personal Insurance reporting to the President of the Personal Lines Division and was subsequently promoted to SVP and CIO with responsibility for technology strategy and delivery for all lines of business within Fireman's Fund reporting to the CEO. I was a member of the CEO's Operating Council consisting of eleven profit and cost center executives. Results include:

- Launched a major transformation of the information technology organization that reduced annual operating expenses by \$80 million. This required moving IT from a vertically integrated IT supply-chain to a horizontal supply chain that included in-sourcing and out-sourcing of IT services.
- Successfully led the outsourcing of infrastructure services resulting in a contract with an IT supplier worth \$380 million over 10 years

- Implemented a new technology infrastructure that positioned FFIC for Web-based e-business solutions including Intranet, Extranet, and Internet capabilities
- Improved time-to-market for new application solutions by 25% and reduced maintenance costs by 20% by implementing a modern application development environment
- Led information technology due diligence for all Fireman's Fund and Allianz of North America acquisitions

While serving as CIO of Fireman's Fund, I also held the added position of CIO of Allianz North America. In this role I was responsible for the strategy and execution of global information technology (IT) for The Allianz Group of companies in Canada, Mexico and the United States. I was one of eight CIO members of The Allianz Global Information Technology Advisory Board.

**BANC ONE SERVICES CORP, Columbus, OH  
September 1997**

**September 1995 –**

Vice President, National Services Manager, Distributed Computing

Responsible for the strategy and delivery of information technology products and services for the distributed computing environment for all lines of business including 200 business applications, 50 mid-range computing platforms, 700 Intel servers, and 40,000 personal computers. Led a team of 540 information technology professionals and managed an expense budget of \$100 million.

- Transformed a disparate set of IT organizations into an enterprise shared service operation with a technology refresh program for all lines of business.
- Improved service levels by 40% while reducing annual operating expense by 20%.
- Responsible for IT operations due diligence for all retail bank acquisitions.

**PNC BANK CORP, Pittsburgh, PA  
1995**

**February 1985 – September**

Vice, President, Group Manager, Systems & Programming, (September 1993-August 1995)

Vice President, Functional Manager, Retail Sales Systems (February 1991-September 1993)

Vice President, Regional Information Center, Philadelphia, PA (February 1989-February 1991)

Vice President, Interactive Services, Louisville, KY (February 1985-February 1989)

Responsible for the strategy and delivery of information technology application solutions for the Retail Banking Division including all delivery systems for branch offices. Responsible for strategy and delivery of all distributed computing technology for all lines of business. Led a combined team of 175 information technology professionals and managed a budget of \$70 million.

- Improved customer service levels by developing and implementing an enterprise solution for platform and teller operations in all branches replacing a legacy system environment.
- Streamlined communication and improved decision making capabilities of the company by developing and implementing enterprise office systems, e-mail, personal computers, local area networking and data warehousing.

- Responsible for information technology due diligence for all Retail Banking acquisitions.

#### **PRIOR BOARD OF DIRECTOR POSITIONS**

- System Task Group International Limited, President and Member of the Board
- Keystone Solution Private Limited, President and Member of the Board

#### **INDUSTRY RECOGNITION AND AFFILIATIONS**

- Insurance & Technology, Elite Eight CIO
- Chairman, LOMA P&C Technology Committee
- Lexmark Inc., Customer Advisory Board

#### **EDUCATION**

- M.B.A., Information Services, Sullivan University, Louisville, KY, Summa Cum Laude
- B.S., Human Resources, Sullivan University, Louisville, KY, Summa Cum Laude
- A.A.S., Business Programming, Watterson College, Louisville, KY

#### **EXECUTIVE EDUCATION**

- Insurance Executive Development, The Wharton Business School
- Leading Strategic Change, Darden Graduate School
- IT for Non-IT Executive, *Sponsor and Instructor for Selected Classes*, Columbia University
- eBusiness Strategy, Harvard Business School